

***PUBLIC HEALTH EVALUATION
881 HILLSIDE AREA (OU1)
TECHNICAL MEMORANDUM NO. 8
CONTAMINANT IDENTIFICATION***

Draft

***Department of Energy
Rocky Flats Plant
Golden, Colorado***

ENVIRONMENTAL RESTORATION PROGRAM

September 1992

ADMIN RECORD

A-OU01-000419

REVIEWED FOR CLASSIFICATION/UCNI

By *[Signature]*
Date *10/1/92* *(MNM)*

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EXECUTIVE SUMMARY

This Contaminant Identification Technical Memorandum presents the contaminant identification and documentation required in Section VII.D.1.a of Attachment A of the Rocky Flats Interagency Agreement dated January 22, 1991 as part of the 881 Hillside Area, Operable Unit 1 (OU1), Public Health Evaluation (PHE) of the Baseline Risk Assessment. This Technical Memorandum was prepared to present the hazardous substances detected at the site and findings of the contaminants of concern (COC) identification process. The scope of this Technical Memorandum is limited to the identification of COCs for OU1 based on pre-Phase III 881 Hillside Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI)/Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Remedial Investigation (RI) environmental data, data collected during the Phase III 881 Hillside RFI/RI, and the supplemental surface soil sampling program completed in March 1992 and described in Technical Memorandum No. 5, Addendum to Final Phase III RFI/RI Work Plan.

The process was initiated using the environmental data for OU1 ground water and surface soils. These media represent the means by which current and future populations could potentially be exposed to OU1 contaminants either directly or indirectly. As described in Technical Memorandum No. 6, Exposure Scenarios, receptors cannot be directly exposed to contaminants in ground water; however, contaminants in ground water that volatilize can potentially affect breathing air in a hypothetical future on-site resident's home. All of the exposure scenarios in Technical Memorandum No. 6 include direct contact with surface soil and breathing air influenced by contaminants in soil.

Surface water and sediments in the South Interceptor Ditch and Woman Creek have potentially received contamination from OU1 via overland flow and/or air dispersion and subsequent deposition; however, these drainages also receive potentially contaminated runoff from other operable units. Because the routine monitoring locations in these drainages are

not located within OU1 proper, they are potentially influenced by other areas, and are planned for investigation as part of OU5 (Woman Creek priority drainage). Contaminant information from these locations was not considered for hazardous substance or COC identification. The COCs identified in OU1 surface soils were evaluated for use in the risk characterization of surface water and sediment in the vicinity of OU1 under the planned exposure scenarios.

Generally each step in the COC identification process represents a screening criterion which, after evaluation, either retains or eliminates a specific contaminant for consideration in the PHE. The screening process was initiated with the analytical results from the site-specific chemical analyte list for each of the media of concern as described above. For ground-water contaminant identification, the selected chemical analyte list was limited to volatile and semivolatile organics from the U.S. Environmental Protection Agency (EPA) target compound list and additional volatile organic compounds analyzed by method 502.2. The rationale for limiting the potential ground-water COCs to organics stems from the exposure pathway identification in Technical Memorandum No. 6, which limits ground-water contaminant exposure to those chemicals that volatilize and potentially affect breathing air. For surface soil, the site-specific chemical analyte list consists of semivolatile organics, polychlorinated biphenyls, pesticides from the EPA target compound list, metals from the EPA target analyte list, and select radionuclides.

These chemical analyte lists are extensive enough to identify the hazardous substances present at OU1 in the media of concern for the exposure pathways identified. Hazardous substances are defined here as those constituents with a greater than 5 percent detection frequency. Hazardous substances detected at the site are then further screened to develop the site-specific COCs. The resultant list of COCs represents those contaminants that survived the screening process. The screening process is summarized by the following implementation steps:

- Detection frequency evaluation and hot spot delineation
- Statistical comparison of site concentrations with background concentrations (surface soil metals and radionuclides only)
- Toxicity concentration screen

Based on the applied COC identification process, ground-water COCs are identified as follows: 1,1-dichloroethene, carbon tetrachloride, tetrachloroethene, trichloroethene, 1,1,1-trichloroethane, and 1,2-dichloroethene. Of the COCs eliminated by the screening process, two contaminants were brought back into the quantitative risk assessment because of physical property considerations. Dichlorodifluoromethane and trichlorofluoromethane may have been introduced by refrigeration after sampling, but they are highly volatile (e.g., gases at room temperature) and were therefore added to the ground-water COC list. Chloroform and methylene chloride were also retained on the ground-water COC list because they are: (1) detected in greater than 5 percent of the samples, (2) carcinogens, and (3) potential transformation products from other COCs.

The surface soil COCs identified through the process are as follows: americium-241, plutonium-239,-240, dibenzofuran, fluoranthene, acenaphthene, fluorene, and pyrene. Because of the magnitude and uncertainty associated with the toxicity constant of dibenzofuran, benzo(a)pyrene and AROCLOR-1254 were retained after the toxicity screen in order to provide appropriate consideration of multiple contaminants in the risk assessment.

Of the surface soil COCs identified, contaminants which were also present in surface water or sediments are as follows: americium-241, plutonium-239,-240, benzo(a)pyrene, acenaphthene, fluoranthene, fluorene, pyrene, and AROCLOR-1254. These contaminants have been potentially resuspended and transported to these media via overland flow or wind dispersion of surface soil contaminants.

The COCs identified in this Technical Memorandum will be used to complete the contaminant fate and transport assessment as part of the PHE exposure assessment and risk characterization.

CONTAMINANTS OF CONCERN MATRIX FOR OU1 BY MEDIA				
Contaminant	Ground Water	Surface Soil	Surface Water	Sediment
1,1-Dichloroethene	X			
total 1,2-Dichloroethene	X			
1,1,1-Trichloroethane	X			
Acenaphthene		X		X
Americium-241		X	X	X
AROCLOR-1254		X		X
Benzo(a)pyrene		X		X
Carbon Tetrachloride	X			
Chloroform	X			
Dibenzofuran		X		
Dichlorodifluoromethane	X			
Fluoranthene		X		X
Fluorene		X		X
Methylene Chloride	X			
Plutonium-239, -240		X	X	X
Pyrene		X		X
Tetrachloroethene	X			
Trichloroethene	X			
Trichlorofluoromethane	X			

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
1.0 INTRODUCTION	1-1
1.1 Purpose	1-1
1.2 Scope	1-1
2.0 IDENTIFICATION OF CONTAMINANTS OF POTENTIAL CONCERN	2-1
2.1 General Site-Specific Data Collection and Data Evaluation Considerations ...	2-1
2.2 Screening of Contaminants	2-3
2.2.1 Site-Specific Chemical Analyte List	2-3
2.2.2 Detection Frequency	2-5
2.2.3 Hot Spot Delineation	2-13
2.2.4 Statistical Comparison to Background	2-13
2.2.5 Toxicity - Concentration Screen	2-18
2.2.6 Mobility, Persistence, and Transformation Product Considerations ..	2-18
2.3 Contaminants of Concern	2-25
3.0 REFERENCES	3-1

LIST OF FIGURES

1-1a	Phase I and Phase II RI Borehole and Monitoring Well Locations	1-3
1-1b	Well and Borehole Location Map	1-4
1-2	Surface Soil Sampling and Analysis Program Sample Locations	1-5
2-1	Protocol For Identification of Contaminants of Concern	2-4

LIST OF TABLES

2-1	Summary Statistics Organics - Ground Water	2-6
2-2a	Summary Statistics Metals and Inorganics - Surface Soil	2-8
2-2b	Summary Statistics Semivolatile Organics - Surface Soil	2-10
2-2c	Summary Statistics Pesticides/PCBs - Surface Soil	2-11
2-2d	Summary Statistics Radionuclides - Surface Soil	2-12
2-3	Background Comparison Summary - Surface Soil	2-15
2-4	Ground Water - VOC/SVOC, Non-Carcinogenic Contaminants - Toxicity Screen	2-19
2-5	Ground Water - VOC/SVOC, Inhalation Carcinogenic Contaminants - Toxicity Screen	2-20
2-6	Surface Soil, Non-Carcinogenic Contaminants - Toxicity Screen Inhalation/Ingestion	2-21
2-7	Surface Soil, Radiological Contaminants-Toxicity Screen, Ingestion/Inhalation	2-22
2-8	Nonradiological Carcinogenic Contaminants - Toxicity Screen Surface Soil Inhalation/Ingestion	2-22
2-9	Potential Volatile Organic COC Transformation Products	2-24
2-10	Contaminants of Concern Matrix For OU1 By Media	2-26

APPENDICES

APPENDIX A	SUMMARY STATISTICS
APPENDIX A1	SUMMARY STATISTICS - GROUND WATER
APPENDIX A2	SUMMARY STATISTICS - SURFACE SOIL
APPENDIX B	BACKGROUND COMPARISON STATISTICS

1.0 INTRODUCTION

1.1 Purpose

This Technical Memorandum presents the contaminant identification and documentation required in Section VII.D.1.a of Attachment A of the Rocky Flats Interagency Agreement dated January 22, 1991 for the 881 Hillside Area, Operable Unit 1 (OU1), Public Health Evaluation (PHE). This Technical Memorandum was prepared to present the hazardous substances detected at the site and findings of the contaminants of concern (COC) identification process.

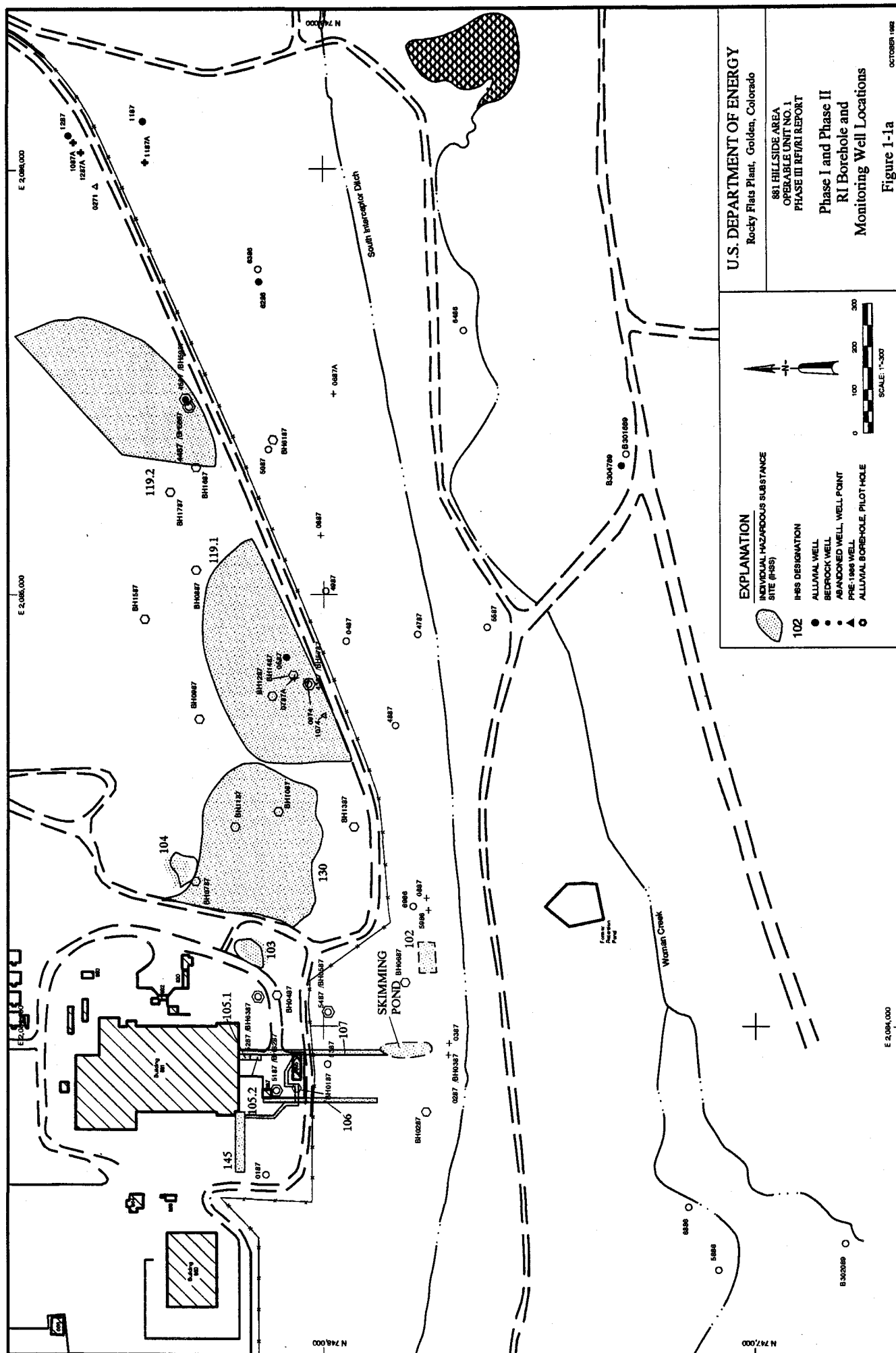
1.2 Scope

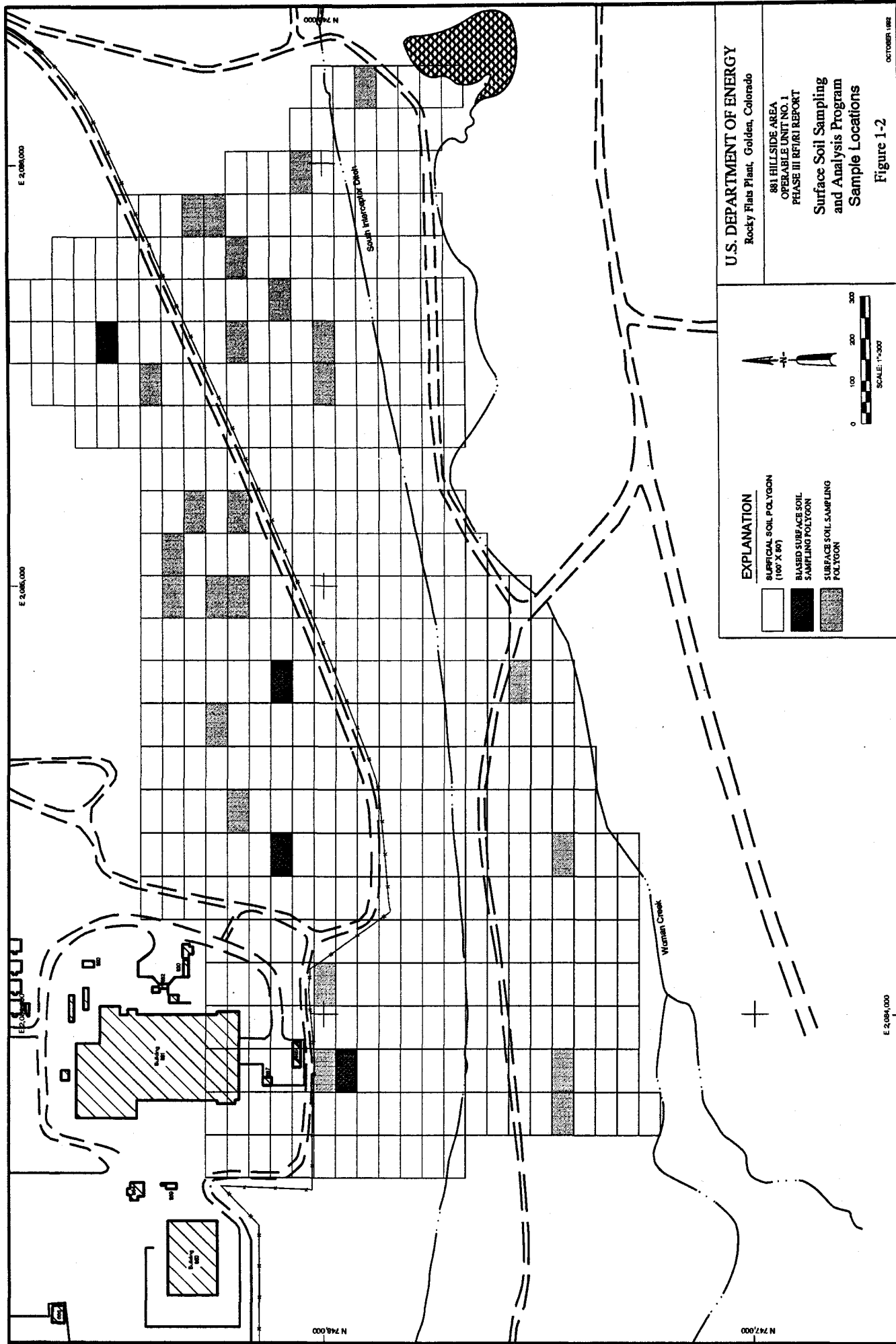
The scope of this Technical Memorandum is limited to the identification of COCs for OU1 based on pre-Phase III Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI)/Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Remedial Investigation (RI) environmental data, data collected during the Phase III 881 Hillside RFI/RI, and the supplemental surface soil sampling program completed in March 1992 and described in Technical Memorandum No. 5, Addendum to Final Phase III RFI/RI Work Plan. The identification process was based on volatile and semivolatile contaminant information in ground water; and semivolatile organic, pesticide, polychlorinated biphenyl, inorganic, and radionuclide contaminant information in surface soils at OU1.

Ground-water COC selection was based on the volatile and semivolatile organic results of the 1990 and 1991 ground-water field sampling and analysis program, and the first quarter of the Phase III RFI/RI efforts. This time frame represents interim monitoring between the Phase II RI and the Phase III RFI/RI work. These programs were biased towards identifying and monitoring the most contaminated areas at OU1, so using these data for contaminant identification is appropriate. Surface soil data collected during the Phase III RFI/RI were

also used for hazardous substance and contaminant identification. The sample locations are illustrated in Figures 1-1a and 1-1b for ground water, and 1-2 for surface soil.

Surface water and sediments in the South Interceptor Ditch and Woman Creek have potentially received contamination from OU1 via overland flow and/or air dispersion and subsequent deposition; however, these drainages also receive potentially contaminated runoff from other operable units. Because the routine monitoring locations in these drainages are not located within OU1 proper, they are potentially influenced by other areas, and are planned for investigation as part of OU5 (Woman Creek priority drainage). Contaminant information from these locations was not considered for hazardous substance or COC identification. The COCs identified in OU1 surface soils were evaluated for use in the risk characterization of surface water and sediment in the vicinity of OU1 under the planned exposure scenarios.





U.S. DEPARTMENT OF ENERGY
Rocky Flats Plant, Golden, Colorado

881 HILLSIDE AREA
OPERABLE UNIT NO. 1
PHASE III RFI/RI REPORT
Surface Soil Sampling
and Analysis Program
Sample Locations

Figure 1-2

OCTOBER 1982

2.0 IDENTIFICATION OF CONTAMINANTS OF POTENTIAL CONCERN

Hazard identification is the process of assessing whether exposure to a substance can be associated with an increase in the incidence of an adverse health effect (NRC, 1983). For the PHE, it involves identifying those contaminants that potentially represent the most toxic, persistent, or mobile constituents at the site based on environmental fate characteristics, toxicity, and the concentration of contaminants present at the site.

2.1 General Site-Specific Data Collection and Data Evaluation Considerations

Prior to initiating the COC identification process, several subtasks were conducted as part of a qualitative data evaluation. Laboratory and data validation qualifiers were used to direct data treatment for the COC development. Additionally, completeness of the Phase III RFI/RI data sets was assessed by comparing the samples collected versus actual results received. This evaluation also included an assessment of the percent validated.

Data qualified with an 'R' indicates they are considered unusable according to U.S. Environmental Protection Agency (EPA) validation criteria and were deleted from the data set prior to initiation of the COC identification process. The treatment of data qualified with 'B,' 'J,' or 'U' is discussed in the following paragraphs.

A 'B' qualifier assigned to an organic compound - volatile, semivolatile, pesticide, or polychlorinated biphenyl (PCB) - signifies that the compound was found in both the sample and an associated laboratory blank. If the reported sample concentration for a 'B' qualified compound was greater than five times the reported detection limit, the analytical result was used as reported. The 'B' qualifier was also assigned if the reported sample concentration was greater than ten times for routine laboratory contaminants; e.g., methylene chloride, acetone, toluene, phthalate esters, and 2-butanone. If the reported sample concentration did not exceed the criterion, the sample result was assigned a 'U' if not detected. A 'B' qualifier

on a metal signifies that the reported concentration is greater than the instrument detection limit but less than the contract required detection limit for that particular chemical. These data were used as reported.

An organic compound concentration is qualified 'J' if the compound is positively identified below the contract-required quantitation limit. The result is considered an estimate because of the uncertainty associated with detected concentrations at low levels. Data qualified with a 'J' were used in the COC screening process.

A 'U' qualifier assigned to an analytical result indicates that the analyzed chemical was not detected above the sample quantitation limit. The 'U' qualifier was the primary mechanism used for evaluating detection frequency for the organic and inorganic constituents. Radionuclides were considered to be nondetects if the error reported by the analytical laboratory was greater than the reported concentration, or if the result was negative.

After calculation of the detection frequency, elevated detection limit values due to dilutions and/or matrix effects were eliminated from the data set as outliers. If a detection limit concentration was greater than two times the most commonly observed detection limit, then the elevated detection limit was eliminated (Gansecki, 1991). An example application is 1,1-dichloroethene in ground water. The most commonly observed (standard) detection limit for 1,1-dichloroethene is 5 parts per billion (ppb). Out of 225 data points, 184 were nondetects. Of the 184 nondetect concentrations, 14 of the detection limit values were in excess of 10 ppb, more than twice the standard limit. These 14 nondetect data points were eliminated from the data set as elevated detection limit values. This dropped the total number of data points for 1,1-dichloroethene in ground water to 211.

Aside from the activities described above, nondetect values had little impact on the COC screening process. Detection limit values were used as reported concentrations for the

background comparison as described in Section 2.2.3. For example, a reported value of 5.0U for lead would be used as 5.0 throughout the screening process.

2.2 Screening of Contaminants

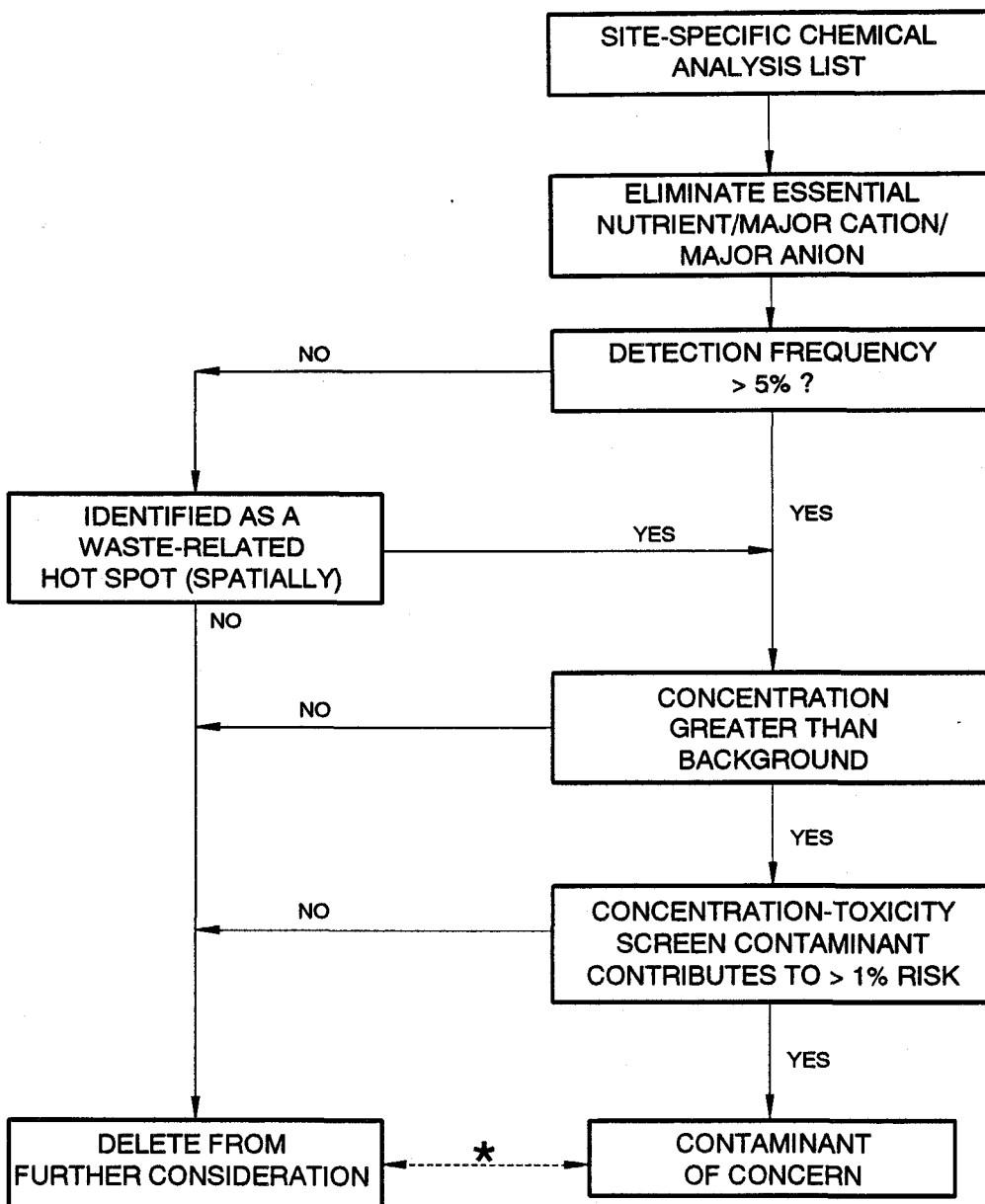
Figure 2-1 illustrates the screening process applied to the OU1 data set to identify the COCs for use in the PHE. This screening process was developed using the discussion in the EPA Risk Assessment Guidance for Superfund as a guide (EPA, 1989a). The process was initiated using the available environmental data from the OU1 1990-1991 routine ground-water sampling program, the first quarter of Phase III RFI/RI ground-water data, and the Phase III RFI/RI surface soils data. The resultant list of COCs represents those contaminants that survived the screening process. Generally, each step identified in Figure 2-1 represents a screening criterion which, after evaluation, either retains or eliminates a specific contaminant for consideration in the PHE. Flow to the left deletes chemicals from the quantitative risk assessment; flow to the right retains the contaminant in the quantitative risk assessment. If a potential contaminant of concern is associated with a "hot spot" (a waste-related contaminant concentrated in a particular area), the chemical was automatically included in the PHE.

Brief discussions of each step in the COC identification process are provided in the following sections. The tables which illustrate and support the findings of each step are included at the end of the document.

2.2.1 Site-Specific Chemical Analyte List

The screening process was initiated with the analytical results from the site-specific chemical analyte list for each media of concern: ground water and surface soils. For ground-water contaminant identification, the selected chemical analyte list was limited to

**FIGURE 2-1. PROTOCOL FOR IDENTIFICATION
OF CONTAMINANTS OF CONCERN**



* Professional judgement may be used to retain or delete a chemical

volatile and semivolatile organics from the EPA target compound list and additional volatile organic compounds analyzed by method 502.2. The rationale for limiting the potential ground-water COCs to organics stems from the exposure pathway identification in Technical Memorandum No. 6, Exposure Scenarios, which limits ground-water contaminant exposure to those chemicals that volatilize and potentially may contaminate the ambient air. For surface soil, the site-specific chemical analyte list consisted of semivolatile organics, PCBs, pesticides from the EPA target compound list, metals from the EPA target analyte list, and select radionuclides.

These chemical analyte lists were extensive enough to identify the hazardous substances present at OU1 in the media of concern for the identified exposure pathways. Appendix A presents each media-specific potential contaminant from the chemical specific analyte list along with summary statistics.

The potential volatile or semivolatile contaminants that were detected in at least one sample from the ground-water data set are presented in Table 2-1. Similarly, surface soil potential contaminants are presented in Tables 2-2a through 2-2d. According to the direction of EPA Region VIII representatives, those chemicals considered essential human nutrients were eliminated from consideration as potential COCs.* The chemicals eliminated according to this direction were calcium, magnesium, potassium, and sodium and are not included on the referenced tables.

2.2.2 Detection Frequency

The detection frequency of each potential contaminant was calculated and is summarized in Tables 2-1 and 2-2a through 2-2d and supported by the information presented in Appendix A. Those constituents with a detection frequency greater than 5 percent were

* Risk Assessment Technical Working Group meeting, July 1992

Table 2-1
Summary Statistics
Organics - Ground Water

Contaminant	Number of Data Points	Number of Detects ^a	Maximum Concentration Detected (µg/L)	Minimum Concentration Detected (µg/L)	Hot Spot Identified?	Consider Chemical Further?
1,1-Dichloroethane	225	15	35.0	2.0	No	Yes
1,1-Dichloroethene	225	40	18,000	2.0	Yes	Yes
1,1,1-Trichloroethane	224	46	20,000	1.0	Yes	Yes
1,1,2-Trichloroethane	225	10	78.0	7.0	No	No ^a
1,2-Dichloroethene	179	10	12,000	10.0	No	Yes
1,2,4-Trimethylbenzene	34	1	0.12	0.12	No	No ^a
Bis(2-ethylhexyl)phthalate	30	2	8.0	2.0	No	Yes
Di-n-butylphthalate	30	4	2.0	2.0	No	Yes
Diethylphthalate	30	3	6.0	2.0	No	Yes
4-Methyl-2-pentanone	180	2	25.0	1.0	No	No ^a
Acetone	174	15	1,400	4.0	Yes	Yes
Benzene	223	1	3.0	3.0	No	No ^a
Carbon tetrachloride	225	39	4,500	0.10	Yes	Yes
Carbon disulfide	189	1	8.0	8.0	No	No ^a
1,2-Dichloroethane	225	10	29.0	4.2	No	No ^a

^a Detection frequency was less than 5%; hence, that chemical was eliminated (EPA, 1989a)

^b Range of detection limits are provided in Appendix A

^c "Hot Spot" is defined as a waste-related contaminant concentrated in a particular area µg/L micrograms/liter

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Table 2-1
Summary Statistics
Organics - Ground Water

Contaminant	Number of Data Points	Number of Detects ^a	Maximum Concentration Detected (µg/L)	Minimum Concentration Detected (µg/L)	Hot Spot ^c Identified?	Consider Chemical Further?
Dichlorodifluoromethane	36	2	2.82	0.81	No	Yes
Tetrachloroethene	225	71	6,000	0.1	Yes	Yes
Toluene	223	23	270.0	0.14	No	Yes
Total Xylenes	188	5	2.0	1.0	No	No ^c
Trichloroethene	225	86	14,000	0.12	Yes	Yes
Trichlorofluoromethane	36	5	10.2	1.1	No	Yes
Vinyl acetate	176	1	8.0	8.0	No	No ^c
Methylene Chloride	226	32	620	1.0	Yes	Yes

^a Detection frequency was less than 5%; hence, that chemical was eliminated (EPA, 1989a)

^b Range of detection limits are provided in Appendix A

^c "Hot Spot" is defined as a waste-related contaminant concentrated in a particular area µg/L micrograms/liter

Table 2-2a
Summary Statistics
Metals and Inorganics - Surface Soil

Contaminant	Number of Data Points	Number of Detects ^b	Maximum Concentration Detected (µg/kg)	Minimum Concentration Detected (µg/kg)	Hot Spot ^c Identified	Consider Chemical Further
Antimony	31	1	9,800	9,800	No	No ^a
Aluminum	31	31	6,370,000	276,000	No	Yes
Arsenic	31	31	8,500	3,000	No	Yes
Barium	31	31	291,000	64,000	No	Yes
Beryllium	31	31	6,200	550	No	Yes
Cadmium	28	6	1,300	710	No	Yes
Chromium	31	31	80,500	8,400	No	Yes
Cobalt	31	31	11,700	5,200	No	Yes
Copper	31	31	181,000	14,200	No	Yes
Iron	31	31	29,700,000	11,600,000	No	Yes
Lead	31	31	228,000	7,100	No	Yes
Manganese	31	31	476,000	145,000	No	Yes
Mercury (Inorganic)	31	4	70.0	60.0	No	Yes
Nickel	31	31	101,000	10,000	No	Yes

^a Detection frequency was less than 5%; hence, that chemical was eliminated (EPA, 1989a)

^b Range of detection limits are provided in Appendix A

^c "Hot Spot" is defined as a waste-related contaminant concentrated in a particular area
µg/kg micrograms/kilogram

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Table 2-2a
Summary Statistics
Metals and Inorganics - Surface Soil

Contaminant	Number of Data Points	Number of Detects ^a	Maximum Concentration Detected (µg/kg)	Minimum Concentration Detected (µg/kg)	Hot Spot ^b Identified	Consider Chemical Further
Selenium	31	16	750	200	No	Yes
Thallium	31	21	510	210	No	Yes
Vanadium	31	31	69,600	26,600	No	Yes
Zinc	31	31	182,000	52,900	No	Yes
Molybdenum	29	24	5,100	1,600	No	Yes
Strontium	31	31	104,000	233	No	Yes
Cesium	31	31	4,400	1,500	No	Yes
Lithium	31	31	15,000	4,500	No	Yes
Tin	31	24	85,900	28,300	No	Yes
Nitrate/Nitrite	27	24	3,830	340	No	Yes

^a Detection frequency was less than 5%; hence, that chemical was eliminated (EPA, 1989a)

^b Range of detection limits are provided in Appendix A

^c "Hot Spot" is defined as a waste-related contaminant concentrated in a particular area
µg/kg micrograms/kilogram

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Table 2-2b
Summary Statistics
Semivolatile Organics - Surface Soil

Contaminant	Number of Data Points	Number of Detects ^a	Maximum Concentration Detected (µg/kg)	Minimum Concentration Detected (µg/kg)	Hot Spot Identified?	Consider Chemical Further?
Napthalene	26	1	110	110	No	No ^a
Acenaphthylene	26	1	110	110	No	No ^a
Dibenzofuran	26	2	86.0	37.0	No	Yes
Fluorene	26	5	230	54.0	No	Yes
Anthracene	26	6	330	47.0	No	Yes
Fluoranthene	26	17	1,900	240	No	Yes
Pyrene	26	15	1,800	220	No	Yes
Benzo(a)anthracene	26	11	830	140	No	Yes
Chrysene	26	14	790	120	No	Yes
Benzo(b)fluoranthene	26	11	810	180	No	Yes
Benzo(k)fluoranthene	26	10	740	120	No	Yes
Benzo(a)pyrene	26	12	750	120	No	Yes
Ideno (1,2,3,-c,d)pyrene	26	10	250	88.0	No	Yes
Dibenzo(a,h)anthracene	26	4	92.0	43.0	No	Yes
Benzo(g,h,i)perylene	26	8	350	82.0	No	Yes
Acenaphthene	26	6	240	45.0	No	Yes
Phenanthrene	26	15	1,600	130	No	Yes

^a Detection frequency was less than 5%; hence, that chemical was eliminated (EPA, 1989a)

^b Range of detection limits are provided in Appendix A

µg/kg micrograms/kilogram

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Table 2-2c
Summary Statistics
Pesticides/Polychlorinated Biphenyls (PCBs) - Surface Soil

Contaminant	Number of Data Points	Number of Detects ^a	Maximum Concentration Detected (µg/kg)	Minimum Concentration Detected (µg/kg)	Hot Spot Identified?	Consider Chemical Further?
AROCOR-1248	26	1	670	670	No	No ^b
AROCOR-1254	26	2	1,200	540	No	Yes

^a Detection frequency was less than 5%; hence, that chemical was eliminated (EPA, 1989a)

^b Range of detection limits are provided in Appendix A
µg/kg micrograms/kilogram

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Table 2-2d
Summary Statistics
Radionuclides - Surface Soil

Contaminant	Number of Data Points	Number of Detects ^b	Maximum Concentration Detected (pCi/g)	Minimum Concentration Detected (pCi/g)	Hot Spot Identified?	Consider Chemical Further? ^a
Uranium - 233, -234	31	31	1.66	0.6791	No	Yes
Uranium - 235	31	15	0.122	0.053	No	Yes
Uranium - 238	31	31	2.20	0.63	No	Yes
Americium - 241	31	29	1.94	0.023	No	Yes
Plutonium - 239, -240	31	31	13.0	0.068	No	Yes
Radium - 226	30	30	1.26	0.65	No	Yes
Radium - 228	30	30	3.05	1.33	No	Yes

^a Detection frequency was less than 5%; hence, that chemical was eliminated (EPA, 1989a)

^b Range of detection limits are provided in Appendix A
pCi/g picoCuries/gram

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retained for further consideration; those with a detection frequency less than 5 percent were eliminated. The results of this COC identification step are supported by the information (i.e., total number of data points and number of detects) presented on Tables 2-1 for OU1 ground water and Table 2-2a through 2-2d for OU1 surface soils.

2.2.3 Hot Spot Delineation

The hot spot assessment step in the COC screening process was designed to retain contaminants with elevated concentrations that might otherwise be eliminated because of infrequent detection. In theory, if a contaminant eliminated from the detection frequency step in the screening process is concentrated in a particular area at an obviously elevated concentration, and is considered a potential waste-related contaminant, that contaminant would be brought back into the screening process as a potential COC.

To aid in the hot spot assessment step, all contaminant concentrations were compared qualitatively against the central tendency (e.g., mean) concentration on a chemical-specific basis. Those compounds exhibiting elevated concentrations with respect to the central tendency concentration of the data set are documented on Tables 2-1 and 2-2a through 2-2d. The chemicals associated with hot spots by this analysis were limited to several volatile organics in ground water and include: 1,1-dichloroethene, 1,1,1-trichloroethane, acetone, carbon tetrachloride, tetrachloroethene, trichloroethene, and methylene chloride.

2.2.4 Statistical Comparison to Background

Statistical methods were employed to determine if contaminants carried over from the detection frequency analysis had concentrations statistically different from site background concentrations. This comparison was limited to metals and radionuclides in surface soil; the organic compounds in groundwater were assumed to be anthropogenic, while detection of

volatile organics in the surface soil was not observed. Statistical tests were performed to assess if the concentration of a potential contaminant was statistically different from background levels. The first two tests analyzed for equality of variance between the two populations. Because the tests performed are affected by the underlying distribution (i.e., the tests assume a near-normal distribution), a second series of nonparametric tests were employed. All statistical analyses are described and presented in Appendix B. A third comparison consisted of comparing the observed site maximum concentrations to background concentrations defined in acceptable literature sources. The results of the background comparison are summarized on Table 2-3.

The first analysis performed was an equality of variance assessment using the F-Test and the Bartlett's Test of Homogeneity of Variance. The null hypothesis for this assessment assumed that if the outcome from both of these tests indicate that the population variances were equal, then the potential contaminant population and the background population were equal. In these cases, the site and background population were not considered significantly different and the contaminant was eliminated. The power of both the F-Test and Bartlett's Test are affected by the underlying distribution of the data; therefore, a second, nonparametric technique was also used.

The second test was employed when the null hypothesis for equality of variance failed in either of the parametric tests. The nonparametric Mann-Whitney U technique was used to assess whether the site and background concentrations were statistically different. The Mann-Whitney U (also called the Wilcoxin Rank Sum) technique was employed for two reasons: (1) many of the potential contaminants exhibited inequality of variance relative to the background data, and (2) the output from the test was not affected by the type of statistical distribution.

The Mann-Whitney U Test provides a method of deciding whether or not there is a difference between the site samples and background samples, or equivalently, whether or not

Table 2-3
Background Comparison Summary - Surface Soil

Chemical	Equality of Variance Indicates the Null Hypothesis (Site = Background) is Correct		Mann-Whitney U Test Indicates the Site Population is \leq Background Population		Literature Values Indicate Site Data is Within Published Background Range	Consider Chemical Further
	F-Test	Bartlett's	Mean Rank Sum Comparison	Significant Difference		
Aluminum	Yes	Yes	---	---	---	No
Arsenic	Yes	Yes	---	---	---	No
Barium	No	Yes	Yes	---	---	No
Beryllium	Yes	No	No	Yes	---	No
Cadmium	Yes	Yes	---	---	---	No
Cesium	Yes	No	No	No	Yes ^(b)	No
Chromium	Yes	No	Yes	---	---	No
Cobalt	Yes	Yes	---	---	---	No
Copper	Yes	No	No	No	Yes ^(b)	No
Iron	Yes	Yes	---	---	---	No
Lead	Yes	No	Yes	---	---	No
Lithium	No	Yes	Yes	---	---	No
Manganese	Yes	No	Yes	---	---	No
Mercury	Yes	Yes	---	---	---	No
Molybdenum	Yes	No	No	No	Yes ^(b)	No
Nickel	Yes	No	No	Yes	---	No
Nitrate/Nitrite	Yes	Yes	---	---	---	No

DRAFT

Table 2-3
Background Comparison Summary - Surface Soil

Chemical	Equality of Variance Indicates the Null Hypothesis (Site = Background) is Correct		Mann-Whitney U Test Indicates the Site Population is \leq Background Population		Literature Values Indicate Site Data is Within Published Background Range	Consider Chemical Further
	F-Test	Bartlett's	Mean Rank Sum Comparison	Significant Difference		
Selenium	No	Yes	Yes	---	---	No
Strontium	Yes	Yes	---	---	---	No
Tallium	Yes	Yes	---	---	---	No
Tin	Yes	Yes	---	---	---	No
Vanadium	No	Yes	No	No	Yes ^(a)	No
Zinc	Yes	No	No	No	Yes ^(a)	No
Americium-241	No	No	No	No	No	Yes
Plutonium-239/240	No	No	No	No	No	Yes
Radium-226	No	Yes	Yes	---	---	No
Radium-228	No	Yes	Yes	---	---	No
Uranium-233/234	Yes	Yes	---	---	---	No
Uranium-235	Yes	Yes	---	---	---	No
Uranium-238	Yes	Yes	---	---	---	No

(a) Kabata-Pendias, A. and H. Pendias, 1984. Upper end of background range: cesium = 5100 $\mu\text{g/kg}$; molybdenum = 17,800 $\mu\text{g/kg}$

(b) Adriano, D.C., 1986. Upper end of background range: copper = 700,000 $\mu\text{g/Kg}$; zinc = 900,000 $\mu\text{g/Kg}$

(c) Bowen, H.J.M., 1979. Upper end of background range: vanadium = 500,000 $\mu\text{g/Kg}$

"---" Indicates that there was no need to perform the test or that the step does not apply

they come from the same population. A detailed description of the test is presented in Appendix B. Two measures of background comparability were employed: (1) comparison of the mean rank sums of the site data and background data generated from the test, and (2) assessment of the statistically significant differences between the two populations. If the results of the Mann-Whitney U Test indicated the mean rank sum of the background data set was higher than the mean rank sum of the site data set, then the potential contaminant concentration was considered to be less than the corresponding background concentration. In these cases, the chemical was eliminated from further consideration in the PHE.

The second measure employed provides a means of assessing whether the two populations exhibit significant statistical differences. The sample statistic, Z , is computed from the ranks of the populations. The probability, p , is then found from the Z value using a cumulative normal distribution table (e.g., Table A1, Gilbert, 1987). If the significance level, α , for a one-tailed probability test exceeds 0.10, the populations do not demonstrate a significant difference and are considered statistically equal. Those chemical data that met this criterion were eliminated from further consideration in the PHE.

The last consideration in the background comparison was information from published background concentrations for select chemicals. The literature search was limited to copper, molybdenum, vanadium, cesium, and zinc in surface soil, all of which are relatively common, rock-forming metals. The maximum concentration for each of these metals (see Table 2-2a) was compared to ranges observed in other soils. Each of these metals was under the upper end of its corresponding background range as indicated on Table 2-3. As a result, the source of these metals in OU1 surface soil cannot be attributed to waste-related contamination and were therefore eliminated from consideration in the PHE.

2.2.5 Toxicity Concentration Screen

The purpose of the toxicity concentration screen was to focus the quantitative risk assessment on those contaminants posing the greatest risk given the exposure scenarios considered. The potential contaminants in ground water and the potential contaminants surviving the background comparison in surface soil were subjected to the screen. To conduct the toxicity concentration screen, noncarcinogens and carcinogens identified in each media were grouped accordingly and combined with toxicity constants identified in EPA's Integrated Risk Information System (IRIS) or Health Effects Assessment Summary Tables (HEAST). The maximum concentration for each of the potential contaminants was multiplied by the inverse of the reference dose ($1/RfD$) for the noncarcinogenic contaminants. The maximum concentration for carcinogens was multiplied by the slope factor. The multiplication described yields a risk factor for each of the potential contaminants (noncarcinogens and carcinogens). By summing the risk factors for each group, the contribution to the total risk was calculated on a percentage basis. Those contaminants contributing to greater than one percent of the total risk were retained for quantitative assessment in the PHE.

The results of the toxicity concentration screen for the ground-water contaminants are presented on Table 2-4 for noncarcinogens and Table 2-5 for carcinogens. Similarly, the results for the surface soil are presented on Tables 2-6, 2-7, and 2-8.

2.2.6 Mobility, Persistence, and Transformation Product Considerations

The chemical properties of the COCs identified in ground water and surface soil were evaluated in terms of mobility, persistence, and potential transformation products.

Table 2-4

**Ground Water - VOC/SVOC
Non-Carcinogenic Contaminants - Toxicity Screen**

Contaminant	Maximum Concentration (ug/L)	Reference Dose ^a (mg/kg/d)	Risk Factor	Percentage of Total Risk	Source of Toxicity Constant
1,1,1-Trichloroethane	20,000	0.09	2.2×10^5	2%	IRIS
1,1,2-Trichloro-1,2,2-trifluoroethane	270	$7.7^{b,c}$	35.1	<1%	IRIS
1,1-Dichloroethane	35	0.1	3,500	<1%	IRIS
1,1-Dichloroethene	18,000	0.009	$2.01E+06$	20%	IRIS
Acetone	1,400	0.1	$1.40E+04$	<1%	IRIS
Bis(2-ethylhexyl)phthalate	8	0.02	400	<1%	IRIS
Carbon Tetrachloride	4,500	7×10^{-4}	$6.4E+06$	65%	IRIS
Chloroform	170	0.01	$1.70E+04$	<1%	IRIS
Di-n-butyl phthalate	2	0.1	20	<1%	IRIS
Dichlorodifluoromethane	25	0.05^b	500	<1%	IRIS
Diethyl phthalate	6	0.8	7.5	<1%	IRIS
Methylene chloride	620	3^b	206.7	<1%	IRIS
Tetrachloroethene (PCE)	6,000	0.01	$6.00E+05$	6%	IRIS
Toluene	270	0.4^b	675	<1%	IRIS
cis-1,2-Dichloroethene	5	0.01	500	<1%	IRIS
1,2-Dichloroethene	12,000	0.02	$6.00E+05$	6%	IRIS
Trichlorofluoromethane	25	0.2^b	125	<1%	IRIS
TOTALS			9.9×10^6	100.00%	

^a Oral reference doses (RfDs) were used only if inhalation RfDs were not available, since inhalation is the only complete exposure pathway for contaminants in ground water (EPA, 1989).

^b Inhalation RfDs were available in HEAST.

^c Derived from the reference concentration of 27 mg/m³ (EPA, 1992).

µg/L micrograms/liter

mg/kg/d milligrams/kilograms/day

HEAST Health Effects Assessment Summary Tables

IRIS Integrated Risk Information System

Table 2-5

**Ground Water - VOC/SVOC
Inhalation Carcinogenic Contaminants -Toxicity Screen**

Contaminant	Concentration ($\mu\text{g/L}$)	Inhalation Slope Factor (mg/kg-d) ⁻¹	Risk Factor	Percentage of Total Risk	Source of Toxicity Constant
Carbon tetrachloride	4500	0.053	2.39E-01	0.91 %	IRIS
Chloroform	170	0.081	1.38E-02	0.06 %	IRIS
Methylene chloride	620	0.00165	1.02E-03	<0.01 %	IRIS
Tetrachloroethene	6000	0.00182	1.09E-02	0.05 %	IRIS
1,1,2-Trichloroethane	78	5.7×10^{-2}	4.4E-04	0.01 %	NONE
1,1-Dichloroethene	18000	1.2	2.16E+01	97.87 %	IRIS
1,1-Dichloroethane	35	ND	0.0	0. %	IRIS
Trichloroethene	14000	0.017	2.38E-01	1.08 %	IRIS
		TOTALS	2.21E+01	100.00 %	

$\mu\text{g/L}$ micrograms/liter
 mg/kg/d milligrams/kilograms/day
 IRIS Integrated Risk Information System

Table 2-6
Surface Soil
Non-Carcinogenic Contaminants - Toxicity Screen
Inhalation/Ingestion

Contaminant	Maximum Concentration (µg/kg)	Oral Reference Dose (mg/kg/d)	Risk Factor	Percentage of Total Risk	Source of Toxicity Constant
Acenaphthene	240	0.06	4.00E+03	3.3 %	IRIS
Americium-241	1.944 pCi/g	NA		0.00 %	N/A
Anthracene	330	0.3	1.10E+03	0.9 %	HEAST
AROCLOR-1254	1200	NA		0.00 %	N/A
Benzo(a)anthracene	830	NA*		0.00 %	N/A
Benzo(a)pyrene	750	NA		0.00 %	IRIS
Benzo(b)fluoranthene	810	NA		0.00 %	IRIS
Benzo(ghi)perylene	350	NA		0.00 %	IRIS
Benzo(k)fluoranthene	740	NA		0.00 %	IRIS
Chrysene	790	NA		0.00 %	HEAST
Dibenzo(a,h)anthracene	92	NA		0.00 %	N/A
Dibenzofuran	86.0	NA		0.00 %	HEAST
Fluoranthene	1900	0.04	4.75E+04	40 %	IRIS
Fluorene	230	0.04	5.75E+03	5 %	IRIS
Phenanthrene	1,600	NA		0.00 %	HEAST
Plutonium-239, -240	12.99 pCi/g	NA		0.00 %	N/A
Pyrene	1800	0.03	6.00E+04	50 %	IRIS
TOTALS			1.2E+05	100 %	

* An RfD for that compound is not available
µg/kg microgram/kilogram
pCi/g picoCurie/gram
mg/kg/d milligram/kilogram/day
N/A not applicable
IRIS Integrated Risk Information System
HEAST Health Effects Assessment Summary Tables

Table 2-7
Surface Soil
Radiological Contaminants - Toxicity Screen
Ingestion/Inhalation

Contaminant	Maximum Concentration (pCi/g)	Inhalation Slope Factor (pCi) ^a	Risk Factor	Percentage of Total risk	Source of Toxicity Constant
Americium-241	1.944	3.2E-08	6.22E-08	11 %	IRIS
Plutonium-239, -240	12.99	3.8E-08	4.94E-07	89 %	IRIS
		TOTALS	5.56E-07	100.00 %	

pCi/g pCiCuries/gram
pCi pCiCuries
IRIS Integrated Risk Information System

Table 2-8
Nonradiological Carcinogenic Contaminants - Toxicity Screen
Surface Soil
Inhalation/Ingestion

Contaminant	Maximum Concentration (µg/kg)	Slope Factor (mg/kg-d) ^a	Risk Factor	Percentage of Total Risk	Source of Toxicity Constant
AROCLOR-1254	1200	7.7 ^b	9.24E+03	0.71 %	HEAST
Benzo(a)anthracene	830	0.61 ^a	5.06E+02	0.04 %	Region IV
Benzo(a)pyrene	750	6.1	4.58E+03	0.35 %	HEAST
Benzo(b)fluoranthene	810	0.61 ^a	4.94E+02	0.04 %	Region IV
Benzo(k)fluoranthene	740	0.61 ^a	4.51E+02	0.03 %	Region IV
Chrysene	790	0.061 ^a	4.82E+01	<0.01 %	HEAST
Dibenzo(a,h)anthracene	92	6.1	5.61E+02	<0.01 %	Region IV
Dibenzofuran	86	15,000	1.29E+06	98.82 %	HEAST ^c
Ideno(1,2,3,-c,d)pyrene	250	0.1	2.5E+01	<0.01 %	Region IV
		TOTALS	1.31E+06	100.00 %	

^a Slope factors for these PAHs were derived by multiplying the inhalation slope factor for BaP times the toxicity equivalency factor of 0.1 or 0.01 recommended by EPA Region IV

^b Oral slope factor

^c This slope factor was derived from the slope factor for TCDD using the toxicity equivalency factor method recommended by EPA Region VIII in the September 1992 risk Assessment Technical Working Group Meeting.

µg/kg micrograms/kilogram
mg/kg/d milligrams/kilogram/day
HEAST Health Effects Assessment Summary Tables

The volatile organic components identified are moderately mobile in the environment because they are soluble in water. Many of the volatile organic compounds identified as COCs are transformation products. The transformation reactions are sequential, so not all of the degradation compounds are expected to be present. The matrix on Table 2-9 provides a qualitative assessment of the potential transformation products of the identified COCs. With the exception of vinyl chloride, which is at the end of the reaction series for most of the COCs, all of the volatile organic COCs are potentially interrelated through degradation. Of the COCs eliminated by the screening process, two were brought back as for this reason. Chloroform and methylene chloride were also retained on the ground-water COC list because they are (1) detected in greater than 5 percent of the samples, (2) carcinogens, and (3) potential transformation products from other COCs. Of the COCs eliminated by the screening process, two contaminants were brought back into the quantitative risk assessment because of physical property considerations. Dichlorodifluoromethane and trichlorofluoromethane may have been introduced into samples by refrigeration after sampling, but they are highly volatile (e.g., gases at room temperature) and were therefore added to the ground-water COC list.

The radionuclide and organic COCs identified in surface soils are considered immobile because both analyte groups are relatively insoluble in water. As a result, each group is considered persistent in the environment. Degradation or transformation products for the organic constituents are not routinely observed; however, the radionuclides decay to daughter products. Americium-241 decays by alpha emission to neptunium-237, while plutonium-239 decays to uranium-235. Given the half-lives for these radionuclides (americium has a half-life of 432 years, plutonium has a half life of 24,110 years), detectable concentrations for these decay products are not presently observable. Additional surface soil COCs based on the consideration of mobility, persistence, or transformation products have not been included in the PHE.

Table 2-9

Potential Volatile Organic COC Transformation Products

Compound	Potential Transformation Products
1,1,1-Trichloroethane	1,1-Dichloroethene cis and trans 1,2-Dichloroethene Chloroethane Vinyl Chloride
1,2-Dichloroethene	Vinyl chloride
Chloroform	Methylene chloride
Trichloroethene	cis and trans 1,2-Dichloroethene Vinyl chloride
Tetrachloroethene	Trichloroethene cis and trans 1,2-Dichloroethene Vinyl chloride
Carbon tetrachloride	Chloroform
1,1-Dichloroethene	Vinyl chloride
Methylene chloride	None listed

2.3 Contaminants of Concern

The COCs identified in this Technical Memorandum will be used to complete the PHE exposure assessment and risk characterization. The COCs will also guide the contaminant fate and transport assessment.

Based on the applied COC identification process for OU1, the COCs identified in the groundwater are 1,1-dichloroethene, total 1,2-dichloroethene, carbon tetrachloride, methylene chloride, tetrachloroethene, trichloroethene, chloroform, trichlorofluoromethane, dichlorodifluoromethane, and 1,1,1-trichloroethane. COCs identified in the surface soil are: americium-241, plutonium-239,-240, dibenzofuran, fluoranthene, acenaphthene, fluorene, and pyrene. Because of the magnitude and uncertainty associated with the toxicity constant of dibenzofuran, benzo(a)pyrene and AROCLOR-1254 were retained after the toxicity screen in order to provide appropriate consideration of multiple contaminants in the risk assessment.

Table 2-10 summarizes the COCs identified and also presents the surface soil COCs which were positively identified in surface water and sediment locations in the vicinity of OU1. The COCs identified in this Technical Memorandum will be used to complete the PHE risk characterization. The COCs will also support the contaminant fate and transport assessment.

Table 2-10
Contaminants of Concern Matrix For OU1 By Media

Contaminant	Ground Water	Surface Soil	Surface Water	Sediment
1,1-Dichloroethene	X			
total 1,2-Dichloroethene	X			
1,1,1-Trichloroethane	X			
Acenaphthene		X		X
Americium-241		X	X	X
AROCLOR-1254		X		X
Benzo(a)pyrene		X		X
Carbon Tetrachloride	X			
Chloroform	X			
Dibenzofuran		X		
Dichlorodifluoromethane	X			
Fluoranthene		X		X
Fluorene		X		X
Methylene Chloride	X			
Plutonium-239,-240		X	X	X
Pyrene		X		X
Tetrachloroethene	X			
Trichloroethene	X			
Trichlorofluoromethane	X			

3.0 REFERENCES

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APPENDIX A1
SUMMARY STATISTICS - GROUND WATER

TEST FOR NORMALITY

The test for normality depended on the number of data points (n). For $n \geq 50$ D'Agostino's analysis was used; for $n \leq 50$ the Shapiro-Wilk analysis was used.

D'Agostino's Analysis

D'Agostino developed the D statistic to test the null hypothesis of normality or lognormality when $n \geq 50$ (Gilbert 1987). This test was applied to the OU1 data set on a chemical-specific basis. The D test is conducted as follows:

- (1) A random sample is drawn from the population of interest.
- (2) The data is ordered from smallest to largest to obtain the sample order statistics.
- (3a) Compute the D statistic (null hypothesis = normal distribution) using the following:

$$D = \frac{\sum_{i=1}^n (i - 1/2 [n+1]) x_{(i)}}{n^2 s}$$

- (3b) Compute the D statistic (null hypothesis = lognormal distribution) using the following:

$$D = \frac{\sum_{i=1}^n (i - 1/2 [n+1]) x \ln_{(i)}}{n^2 s}$$

- (5) The D statistic is transformed to the Y statistic by:

$$Y = \frac{D - 0.28209479}{0.02998598/\sqrt{n}}$$

- (6) Reject the null hypothesis of a if Y is less than $\alpha/2$ or $1-\alpha/2$.

- 5) Compute the W statistic.

$$W = \frac{1}{d} \left[\sum_{i=1}^k a_i (X_{[n-i+1]} - X_{[i]}) \right]^2$$

- 6) Obtain the quantile at the significance level (0.05) from appropriate W statistic Table. If the W test statistic is less than the quantile, the i.e., null hypothesis is rejected (data set population does not have a normal distribution).

To test for a lognormal distribution, follow the top six steps using Y_i instead of X_i where:

$$Y_i = \ln X_i$$

Estimating to Median

The median of any distribution, no matter what its shape, can be estimated by the sample median.

- 1) The data are ranked from smallest to largest
- 2) The sample median (median of n data) is computed from the sample order Statistic

$$X_{[1]} \leq X_{[2]} \dots X_{[n]}$$

as follows:

Sample median if n is odd =

$$X_{[(n+1)/2]}$$

if n is even =

$$\frac{1}{2} (X_{[n/2]} + X_{[(n+2)/2]})$$

GROUNDWATER - ORGANICS/PESTICIDES/PCBs - 8/17/92

CHEMICAL = 1,1,1,2-TETRACHLOROETHANE

MAX NONDET = 100.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.100000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.100000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.1000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.44119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.100000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.100000000000 UG/L

TOTAL # DATA = 36
DETECTS = 0
NONDETECTS = 36
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 3

TOTAL # STATISTICAL DATA = 33

CHEMICAL = 1,1,1-TRICHLOROETHANE

MAX DETECT = 2000.000000000 UG/L
MIN DETECT = 1.000000000 UG/L
MAX NONDET = 150.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 1190.0289099526 UG/L
STD DEV = 3544.836231842878 UG/L
UCL = 1668.34062690403152 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -62.96929399504098

STAT RANGE = -2.382 - 1.507

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 7.969065750804 UG/L
GEO STD DEV = 21.650157702705 UG/L
GEOMET UCL = 10.89036406355129 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -25.630111755307

STAT RANGE = -2.382 - 1.507

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.000000000000 UG/L

TOTAL # DATA = 224
DETECTS = 45
NONDETECTS = 179
DETECT FREQ = 20.09 %

NONDETECTS > 2x NONDETECT MINIMUM = 13

TOTAL # STATISTICAL DATA = 211

*** HOTSPOT ANALYSIS ***

LOCATION	RESULT	UG/L	QUAL
6986	790.000000000	UG/L	QUAL =
0974	1800.000000000	UG/L	QUAL =
4387	3000.000000000	UG/L	QUAL =
0974	3200.000000000	UG/L	QUAL =
4387	3200.000000000	UG/L	QUAL = E
0974	4400.000000000	UG/L	QUAL = E
0974	4400.000000000	UG/L	QUAL = E
4387	4500.000000000	UG/L	QUAL = E
4387	4600.000000000	UG/L	QUAL = E

LOCATION = 4387 RESULT = 4600.0000000000 UG/L QUAL = E
LOCATION = 4387 RESULT = 5900.0000000000 UG/L QUAL = B
LOCATION = 0974 RESULT = 6600.0000000000 UG/L QUAL = D
LOCATION = 0974 RESULT = 6600.0000000000 UG/L QUAL = D
LOCATION = 0974 RESULT = 6600.0000000000 UG/L QUAL = D
LOCATION = 4387 RESULT = 7400.0000000000 UG/L QUAL = D
LOCATION = 4387 RESULT = 7400.0000000000 UG/L QUAL = D
LOCATION = 4387 RESULT = 7400.0000000000 UG/L QUAL = D
LOCATION = 0974 RESULT = 7600.0000000000 UG/L QUAL =
LOCATION = 4387 RESULT = 10000.0000000000 UG/L QUAL =
LOCATION = 0974 RESULT = 12000.0000000000 UG/L QUAL = D
LOCATION = 0974 RESULT = 12000.0000000000 UG/L QUAL =
LOCATION = 0974 RESULT = 13000.0000000000 UG/L QUAL = E
LOCATION = 4387 RESULT = 13000.0000000000 UG/L QUAL =
LOCATION = 0974 RESULT = 14000.0000000000 UG/L QUAL =
LOCATION = 4387 RESULT = 14000.0000000000 UG/L QUAL = D
LOCATION = 4387 RESULT = 15000.0000000000 UG/L QUAL = D
LOCATION = 0974 RESULT = 18000.0000000000 UG/L QUAL = E
LOCATION = 0974 RESULT = 19000.0000000000 UG/L QUAL = D
LOCATION = 4387 RESULT = 20000.0000000000 UG/L QUAL = E

HOTSPOTS = 29

CHEMICAL = 1,1,2,2-TETRACHLOROETHANE

MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.080000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 4.1522279793 UG/L
STD DEV = 1.886444612081 UG/L
UCL = 4.41837491803406 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -41.45636380471379
STAT RANGE = -2.400 - 1.486
DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 2.513188600446 UG/L
GEO STD DEV = 4.456749288491 UG/L
GEOMET UCL = 3.14196411410444 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -42.132425574342
STAT RANGE = -2.400 - 1.486
DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.00000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 0
NONDETECTS = 225
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 32
TOTAL # STATISTICAL DATA = 193

CHEMICAL = 1,1,2-TRICHLORO-1,2,2-TRIFLUOR

MAX DETECT = 270.000000000 UG/L
MIN DETECT = 6.400000000 UG/L

MEAN = 89.900000000 UG/L
STD DEV = 107.593168928143 UG/L
UCL = 195.34130554958051 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7990008201884717
TEST STAT = 0.748
DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 32.107368571029 UG/L
GEO STD DEV = 4.752583043357 UG/L
GEOMET UCL = 36.76489995351891 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.8911139541076969
TEST STAT = 0.748
DISTRIBUTION IS LOGNORMAL - LOGNORM STAT > TEST STAT

MEDIAN = 8.200000000 UG/L
MEDIAN UCL = NOT COMPUTED - INSUFFICIENT DATA

TOTAL # DATA = 4
DETECTS = 4
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 4

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = 1,1,2-TRICHLOROETHANE

MAX DETECT = 78.000000000 UG/L
MIN DETECT = 7.000000000 UG/L
MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 6.1454639175 UG/L
STD DEV = 10.643183242200 UG/L
UCL = 7.64317052503640 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -74.33133765603796

STAT RANGE = -2.398 - 1.487

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 2.950707463669 UG/L
GEO STD DEV = 4.475212833108 UG/L
GEOMET UCL = 3.58045851442467 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -35.650080477719

STAT RANGE = -2.398 - 1.487

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 10
NONDETECTS = 215
DETECT FREQ = 4.44 %

NONDETECTS > 2x NONDETECT MINIMUM = 31

TOTAL # STATISTICAL DATA = 194

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = 1,1-DICHLOROETHANE

MAX DETECT = 35.000000000 UG/L
MIN DETECT = 2.000000000 UG/L
MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 5.1728205128 UG/L
STD DEV = 4.639908237774 UG/L
UCL = 5.82407114425714 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -48.71075868996929

STAT RANGE = -2.397 - 1.489

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 3.153316151510 UG/L
GEO STD DEV = 3.644861938928 UG/L
GEOMET UCL = 3.66490356177417 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -33.673966732696

STAT RANGE = -2.397 - 1.489

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 15
NONDETECTS = 210
DETECT FREQ = 6.67 %

NONDETECTS > 2x NONDETECT MINIMUM = 30

TOTAL # STATISTICAL DATA = 195

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = 1,1-DICHLOROETHENE

MAX DETECT = 18000.000000000 UG/L
MIN DETECT = 2.000000000 UG/L
MAX NONDET = 500.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 812.9459715640 UG/L
STD DEV = 2604.864807786377 UG/L
UCL = 1164.42549759864687 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -67.66657445449782

STAT RANGE = -2.382 - 1.507

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 7.806112786606 UG/L
GEO STD DEV = 15.991122574972 UG/L
GEOMET UCL = 9.96382637182218 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -28.208482762316

STAT RANGE = -2.382 - 1.507

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.00000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 40
NONDETECTS = 185
DETECT FREQ = 17.78 %

NONDETECTS > 2x NONDETECT MINIMUM = 14

TOTAL # STATISTICAL DATA = 211

*** HOTSPOT ANALYSIS ***

LOCATION = 6986	RESULT = 690.000000000	UG/L	QUAL =
LOCATION = 4387	RESULT = 1400.000000000	UG/L	QUAL =
LOCATION = 0974	RESULT = 1700.000000000	UG/L	QUAL =
LOCATION = 0974	RESULT = 2300.000000000	UG/L	QUAL =
LOCATION = 4387	RESULT = 2400.000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT = 2900.000000000	UG/L	QUAL =
LOCATION = 4387	RESULT = 3600.000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT = 4300.000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT = 4300.000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT = 4300.000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT = 4800.000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT = 4800.000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT = 4900.000000000	UG/L	QUAL =
LOCATION = 0974	RESULT = 5800.000000000	UG/L	QUAL = E
LOCATION = 0974	RESULT = 5800.000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT = 6000.000000000	UG/L	QUAL = D
LOCATION = 0974	RESULT = 6100.000000000	UG/L	QUAL = D
LOCATION = 0974	RESULT = 6100.000000000	UG/L	QUAL = D
LOCATION = 0974	RESULT = 6100.000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT = 7200.000000000	UG/L	QUAL =
LOCATION = 0974	RESULT = 7900.000000000	UG/L	QUAL =
LOCATION = 4387	RESULT = 7900.000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT = 8200.000000000	UG/L	QUAL = D
LOCATION = 0974	RESULT = 12000.000000000	UG/L	QUAL =
LOCATION = 0974	RESULT = 15000.000000000	UG/L	QUAL = E
LOCATION = 0974	RESULT = 16000.000000000	UG/L	QUAL = D
LOCATION = 0974	RESULT = 18000.000000000	UG/L	QUAL =

HOTSPOTS = 27

CHEMICAL = 1,1-DICHLOROPROPENE

MAX NONDET = 5.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.100000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 0.10000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.100000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.44119220567317 UG/L
SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION
LOGNORM STAT = *****
TEST STAT = 0.931
DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.1000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.10000000000000 UG/L

TOTAL # DATA = 34
DETECTS = 0
NONDETECTS = 34
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1
TOTAL # STATISTICAL DATA = 33

CHEMICAL = 1,2,3-TRICHLOROBENZENE

MAX NONDET = 5.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.100000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.1000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.930

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.1000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.44648232278141 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.930

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.100000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.1000000000000 UG/L

TOTAL # DATA = 33
DETECTS = 0
NONDETECTS = 33
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 32

CHEMICAL = 1,2,3-TRICHLOROPROPANE

MAX NONDET = 150.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.100000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.1000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.1000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.44119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.100000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.1000000000000 UG/L

TOTAL # DATA = 36
DETECTS = 0
NONDETECTS = 36
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 3

TOTAL # STATISTICAL DATA = 33

CHEMICAL = 1,2,4-TRICHLOROBENZENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.100000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.100000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.100000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 0.44119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.100000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.100000000 UG/L

TOTAL # DATA = 69
DETECTS = 0
NONDETECTS = 69
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 36

TOTAL # STATISTICAL DATA = 33

CHEMICAL = 1,2-DIBROMOETHANE

MAX NONDET = 25.000000000 UG/L
MIN NONDET = 0.500000000 UG/L
STD NONDET = 0.500000000 UG/L

MEAN = 0.500000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.500000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.500000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 0.84119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.500000000 UG/L

TOTAL # DATA = 34
DETECTS = 0
NONDETECTS = 34
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

CHEMICAL = 1,2-DICHLOROBENZENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 0.090000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.0997058824 UG/L
STD DEV = 0.001689577249 UG/L
UCL = 0.10027381216401 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.1754825412123534

TEST STAT = 0.933

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.099690595775 UG/L
GEO STD DEV = 1.017960863632 UG/L
GEOMET UCL = 0.44186513754773 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.1754825412144758

TEST STAT = 0.933

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.100000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.1000000000000 UG/L

TOTAL # DATA = 71
DETECTS = 0
NONDETECTS = 71
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 37

TOTAL # STATISTICAL DATA = 34

CHEMICAL = 1,2-DICHLOROETHANE

MAX DETECT = 29.000000000 UG/L
MIN DETECT = 4.200000000 UG/L
MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 4.6067708333 UG/L
STD DEV = 3.414339551433 UG/L
UCL = 5.08973194881893 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -53.09677750768846

STAT RANGE = -2.401 - 1.484

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 2.660536185296 UG/L
GEO STD DEV = 4.537113221630 UG/L
GEOMET UCL = 3.30231455255959 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -38.919551926104

STAT RANGE = -2.401 - 1.484

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 10
NONDETECTS = 215
DETECT FREQ = 4.44 %

NONDETECTS > 2x NONDETECT MINIMUM = 33

TOTAL # STATISTICAL DATA = 192

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = 1,2-DICHLOROETHENE

MAX DETECT = 12000.000000000 UG/L
MIN DETECT = 10.000000000 UG/L
MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.060000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 85.847066667 UG/L
STD DEV = 976.054415065435 UG/L
UCL = 242.04830483593321 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -98.41140761698088
STAT RANGE = -2.452 - 1.423

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 5.532639741549 UG/L
GEO STD DEV = 2.221022983682 UG/L
GEOMET UCL = 5.88807744532703 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -75.635315792544
STAT RANGE = -2.452 - 1.423

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000 UG/L

TOTAL # DATA = 179
DETECTS = 10
NONDETECTS = 169
DETECT FREQ = 5.59 %

NONDETECTS > 2x NONDETECT MINIMUM = 29

TOTAL # STATISTICAL DATA = 150

*** HOTSPOT ANALYSIS ***

LOCATION = 0974 RESULT = 12000.000000000 UG/L QUAL = D
HOTSPOTS = 1

CHEMICAL = 1,2-DICHLOROPROPANE

MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.080000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 4.1522279793 UG/L
STD DEV = 1.886444612081 UG/L
UCL = 4.41837491803406 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -41.45636380471379
STAT RANGE = -2.400 - 1.486

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 2.513188600446 UG/L
GEO STD DEV = 4.456749288491 UG/L
GEOMET UCL = 3.14196411410444 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -42.132425574342
STAT RANGE = -2.400 - 1.486

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 0
NONDETECTS = 225
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 32

TOTAL # STATISTICAL DATA = 193

CHEMICAL = 1,2-DIMETHYLBENZENE

MAX NONDET = 10.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 0.200000000 UG/L

MEAN = 0.200000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.200000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.2000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.54119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.200000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.200000000000 UG/L

TOTAL # DATA = 36
DETECTS = 0
NONDETECTS = 36
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 3

TOTAL # STATISTICAL DATA = 33

CHEMICAL = 1,3-DICHLOROBENZENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.100000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.100000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.933

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.1000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.43613722687932 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.933

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.100000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.100000000000 UG/L

TOTAL # DATA = 71
DETECTS = 0
NONDETECTS = 71
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 37

TOTAL # STATISTICAL DATA = 34

=====

CHEMICAL = 1,3-DICHLOROPROPANE

MAX NONDET = 5.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.100000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.100000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.1000000000 UG/L
GEO STD DEV = 1.00000000000 UG/L
GEOMET UCL = 0.44119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.100000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.100000000000 UG/L

TOTAL # DATA = 34
DETECTS = 0
NONDETECTS = 34
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

=====

CHEMICAL = 1,3-DICHLOROPROPENE

MAX NONDET = 8.000000000 UG/L
MIN NONDET = 0.080000000 UG/L
STD NONDET = 0.080000000 UG/L

MEAN = 0.080000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.080000000000 UG/L

INSUFFICIENT NUMBER OF DATAPOINTS TO DETERMINE DISTRIBUTION TYPE

GEO MEAN = 0.08000000000 UG/L
GEO STD DEV = 1.00000000000 UG/L
GEOMET UCL = 2.040000000000 UG/L

MEDIAN = 0.040000000 UG/L QUALIFIER = U*
MEDIAN UCL = NOT COMPUTED - INSUFFICIENT DATA

TOTAL # DATA = 2
DETECTS = 0
NONDETECTS = 2
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 1

=====

CHEMICAL = 1,3-DIMETHYLBENZENE

MAX NONDET = 10.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 0.200000000 UG/L

MEAN = 0.200000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.200000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.200000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 0.54119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.200000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.2000000000000 UG/L

TOTAL # DATA = 34
DETECTS = 0
NONDETECTS = 34
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

CHEMICAL = 1,4-DICHLOROBENZENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 0.080000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.0994117647 UG/L
STD DEV = 0.003379154498 UG/L
UCL = 0.10054762432802 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.1754825412121525

TEST STAT = 0.933

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.099345844412 UG/L
GEO STD DEV = 1.038421557188 UG/L
GEOMET UCL = 0.44839798697663 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.1754825412126897

TEST STAT = 0.933

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.100000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.1000000000000 UG/L

TOTAL # DATA = 71
DETECTS = 0
NONDETECTS = 71
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 37

TOTAL # STATISTICAL DATA = 34

CHEMICAL = 1-CHLOROHEXANE

MAX NONDET = 200.000000000 UG/L
MIN NONDET = 2.000000000 UG/L
STD NONDET = 2.000000000 UG/L

MEAN = 2.000000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 2.000000000 UG/L

INSUFFICIENT NUMBER OF DATAPOINTS TO DETERMINE DISTRIBUTION TYPE

GEO MEAN = 2.000000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 3.960000000 UG/L

MEDIAN = 1.000000000 UG/L QUALIFIER = U*
MEDIAN UCL = NOT COMPUTED - INSUFFICIENT DATA

TOTAL # DATA = 2
DETECTS = 0
NONDETECTS = 2
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1
TOTAL # STATISTICAL DATA = 1

CHEMICAL = 2,4,5-TRICHLOROPHENOL

MAX NONDET = 58.000000000 UG/L
MIN NONDET = 50.000000000 UG/L
STD NONDET = 50.000000000 UG/L

MEAN = 50.5517241379 UG/L
STD DEV = 2.027163925062 UG/L
UCL = 51.28953652351624 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307
TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 50.514421403008 UG/L
GEO STD DEV = 1.038325126842 UG/L
GEOMET UCL = 50.89233318871878 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609218563
TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 50.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 50.000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 29

CHEMICAL = 2,4,6-TRICHLOROPHENOL

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.1379310345 UG/L
STD DEV = 0.506790981265 UG/L
UCL = 10.32238413087906 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307
TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.126532843277 UG/L
GEO STD DEV = 1.047283281602 UG/L
GEOMET UCL = 10.50770506463957 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609252613
TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

CHEMICAL = 2,4-DICHLOROPHENOL

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.1379310345 UG/L
STD DEV = 0.506790981265 UG/L
UCL = 10.32238413087906 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307
TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.126532843277 UG/L
GEO STD DEV = 1.047283281602 UG/L
GEOMET UCL = 10.50770506463957 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609252613
TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

CHEMICAL = 2,4-DIMETHYLPHENOL

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.1379310345 UG/L
STD DEV = 0.506790981265 UG/L
UCL = 10.32238413087906 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307

TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.126532843277 UG/L
GEO STD DEV = 1.047283281602 UG/L
GEOMET UCL = 10.50770506463957 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609252613

TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

CHEMICAL = 2,4-DINITROPHENOL

MAX NONDET = 58.000000000 UG/L
MIN NONDET = 50.000000000 UG/L
STD NONDET = 50.000000000 UG/L

MEAN = 50.400000000 UG/L
STD DEV = 1.743559577416 UG/L
UCL = 51.16414867663302 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2359026947368308

TEST STAT = 0.905

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 50.372430205941 UG/L
GEO STD DEV = 1.032876254052 UG/L
GEOMET UCL = 50.82510818315652 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2359026947360258

TEST STAT = 0.905

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 50.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 50.000000000 UG/L

TOTAL # DATA = 20
DETECTS = 0
NONDETECTS = 20
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 20

CHEMICAL = 2,4-DINITROTOLUENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703
TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801
TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = 2,6-DINITROTOLUENE

MAX DETECT = 2.000000000 UG/L
MIN DETECT = 2.000000000 UG/L
MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 9.866666667 UG/L
STD DEV = 1.543444920372 UG/L
UCL = 10.41898133811429 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.3281629455223878
TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 9.593558973503 UG/L
GEO STD DEV = 1.342699144632 UG/L
GEOMET UCL = 10.07403769168188 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2555259769947900
TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 1
NONDETECTS = 29
DETECT FREQ = 3.33 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = 2-BUTANONE

MAX DETECT = 580.000000000 UG/L
MIN DETECT = 110.000000000 UG/L
MAX NONDET = 1400.000000000 UG/L
MIN NONDET = 5.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 15.265625000 UG/L
STD DEV = 50.887204367693 UG/L
UCL = 24.08138338458528 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -86.83206943318744

STAT RANGE = -2.496 - 1.370

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 10.513289588532 UG/L
GEO STD DEV = 1.525207147118 UG/L
GEOMET UCL = 10.77751824606044 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -79.638057684939

STAT RANGE = -2.496 - 1.370

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 152
DETECTS = 2
NONDETECTS = 150
DETECT FREQ = 1.32 %

NONDETECTS > 2x NONDETECT MINIMUM = 24

TOTAL # STATISTICAL DATA = 128

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = 2-CHLOROETHYL VINYL ETHER

MAX NONDET = 14.000000000 UG/L
MIN NONDET = 0.140000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 8.535000000 UG/L
STD DEV = 5.114555210378 UG/L
UCL = 13.54726410616998 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8669958700743066

TEST STAT = 0.748

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 3.741657386774 UG/L
GEO STD DEV = 6.698830528183 UG/L
GEOMET UCL = 10.30651130439366 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6921612279006224

TEST STAT = 0.748

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = NOT COMPUTED - INSUFFICIENT DATA

TOTAL # DATA = 4
DETECTS = 0
NONDETECTS = 4
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 4

CHEMICAL = 2-CHLORONAPHTHALENE

MAX NONDET = 12.0000000000 UG/L
MIN NONDET = 10.0000000000 UG/L
STD NONDET = 10.0000000000 UG/L

MEAN = 10.1333333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.0000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = 2-CHLOROPHENOL

MAX NONDET = 12.0000000000 UG/L
MIN NONDET = 10.0000000000 UG/L
STD NONDET = 10.0000000000 UG/L

MEAN = 10.1379310345 UG/L
STD DEV = 0.506790981265 UG/L
UCL = 10.32238413087906 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307

TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.126532843277 UG/L
GEO STD DEV = 1.047283281602 UG/L
GEOMET UCL = 10.50770506463957 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609252613

TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.0000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

CHEMICAL = 2-HEXANONE

MAX DETECT = 43.000000000 UG/L
MIN DETECT = 43.000000000 UG/L
MAX NONDET = 1400.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.2340425532 UG/L
STD DEV = 2.769228834642 UG/L
UCL = 10.69113638425300 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -95.09331500851764
STAT RANGE = -2.470 - 1.401

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 10.103984796936 UG/L
GEO STD DEV = 1.130207421961 UG/L
GEOMET UCL = 10.29053884185083 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -95.093315008538
STAT RANGE = -2.470 - 1.401

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 169
DETECTS = 1
NONDETECTS = 168
DETECT FREQ = 0.59 %

NONDETECTS > 2x NONDETECT MINIMUM = 28
TOTAL # STATISTICAL DATA = 141

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = 2-HYDROXY-2-METHYL-4-PENTANONE

MAX DETECT = 10.000000000 UG/L
MIN DETECT = 8.900000000 UG/L

MEAN = 9.500000000 UG/L
STD DEV = 0.454606056566 UG/L
UCL = 10.01443518110210 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9757877356451532
TEST STAT = 0.767

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 9.488999270078 UG/L
GEO STD DEV = 1.049464729815 UG/L
GEOMET UCL = 10.67658040883473 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9709688161161070
TEST STAT = 0.767

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 9.250000000 UG/L
MEDIAN UCL = NOT COMPUTED - INSUFFICIENT DATA

TOTAL # DATA = 3
DETECTS = 3
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 3

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = 2-METHYLNAPHTHALENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = 2-METHYLPHENOL

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.1379310345 UG/L
STD DEV = 0.506790981265 UG/L
UCL = 10.32238413087906 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307

TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.126532843277 UG/L
GEO STD DEV = 1.047283281602 UG/L
GEOMET UCL = 10.50770506463957 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609252613

TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

CHEMICAL = 2-NITROANILINE

MAX NONDET = 58.000000000 UG/L
MIN NONDET = 50.000000000 UG/L
STD NONDET = 50.000000000 UG/L

MEAN = 50.533333333 UG/L
STD DEV = 1.995550606279 UG/L
UCL = 51.24743194671220 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285872

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 50.497189054048 UG/L
GEO STD DEV = 1.037716321355 UG/L
GEOMET UCL = 50.86853107054608 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214236864

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 50.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 50.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = 2-NITROPHENOL

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.1379310345 UG/L
STD DEV = 0.506790981265 UG/L
UCL = 10.32238413087906 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307

TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.126532843277 UG/L
GEO STD DEV = 1.047283281602 UG/L
GEOMET UCL = 10.50770506463957 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609252613

TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

CHEMICAL = 3,3'-DICHLOROBENZIDINE

MAX NONDET = 23.000000000 UG/L
MIN NONDET = 20.000000000 UG/L
STD NONDET = 20.000000000 UG/L

MEAN = 20.200000000 UG/L
STD DEV = 0.748331477355 UG/L
UCL = 20.46778698001708 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285834
TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 20.187220110250 UG/L
GEO STD DEV = 1.035477583482 UG/L
GEOMET UCL = 20.55776100468861 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214321332
TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 20.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 20.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = 3-NITROANILINE

MAX NONDET = 58.000000000 UG/L
MIN NONDET = 50.000000000 UG/L
STD NONDET = 50.000000000 UG/L

MEAN = 50.533333333 UG/L
STD DEV = 1.995550606279 UG/L
UCL = 51.24743194671220 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285872
TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 50.497189054048 UG/L
GEO STD DEV = 1.037716321355 UG/L
GEOMET UCL = 50.86853107054608 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214236864
TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 50.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 50.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = 4,4'-DDD

MAX NONDET = 0.1000000000 UG/L
MIN NONDET = 0.1000000000 UG/L
STD NONDET = 0.1000000000 UG/L

MEAN = 0.1000000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 0.10000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.100000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.48438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.1000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.10000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 4,4'-DDE

MAX NONDET = 0.1000000000 UG/L
MIN NONDET = 0.1000000000 UG/L
STD NONDET = 0.1000000000 UG/L

MEAN = 0.1000000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 0.10000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.100000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.48438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.1000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.10000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 4,4'-DDT

MAX NONDET = 0.100000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.100000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 0.1000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.10000000000 UG/L
GEO STD DEV = 1.00000000000 UG/L
GEOMET UCL = 0.48438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.100000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.1000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 4,6-DINITRO-2-METHYLPHENOL

MAX NONDET = 58.000000000 UG/L
MIN NONDET = 50.000000000 UG/L
STD NONDET = 50.000000000 UG/L

MEAN = 50.5517241379 UG/L
STD DEV = 2.027163925062 UG/L
UCL = 51.28953652351624 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307

TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 50.514421403008 UG/L
GEO STD DEV = 1.038325126842 UG/L
GEOMET UCL = 50.89233318871878 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609218563

TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 50.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 50.0000000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

CHEMICAL = 4-BROMOPHENYL PHENYL ETHER

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = 4-CHLORO-3-METHYLPHENOL

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.1379310345 UG/L
STD DEV = 0.506790981265 UG/L
UCL = 10.32238413087906 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307

TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.126532843277 UG/L
GEO STD DEV = 1.047283281602 UG/L
GEOMET UCL = 10.50770506463957 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609252613

TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

CHEMICAL = 4-CHLOROANILINE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = 4-CHLOROPHENYL PHENYL ETHER

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = 4-METHYL-2-PENTANONE

MAX DETECT = 25.000000000 UG/L
MIN DETECT = 1.000000000 UG/L
MAX NONDET = 1400.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.0405405405 UG/L
STD DEV = 1.437332262262 UG/L
UCL = 10.27211038951105 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -91.71622943336057

STAT RANGE = -2.456 - 1.418

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 9.906768785323 UG/L
GEO STD DEV = 1.225674751459 UG/L
GEOMET UCL = 10.10423847947094 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -92.913376958134

STAT RANGE = -2.456 - 1.418

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 180
DETECTS = 2
NONDETECTS = 178
DETECT FREQ = 1.11 %

NONDETECTS > 2x NONDETECT MINIMUM = 32

TOTAL # STATISTICAL DATA = 148

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = 4-METHYLPHENOL

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.1538461538 UG/L
STD DEV = 0.532938710021 UG/L
UCL = 10.35870119879293 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.3006385416666724

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.141235431140 UG/L
GEO STD DEV = 1.049782613154 UG/L
GEOMET UCL = 10.54475887644147 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.3006385416661057

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 4-NITROANILINE

MAX NONDET = 58.000000000 UG/L
MIN NONDET = 50.000000000 UG/L
STD NONDET = 50.000000000 UG/L

MEAN = 50.533333333 UG/L
STD DEV = 1.995550606279 UG/L
UCL = 51.24743194671220 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285872

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 50.497189054048 UG/L
GEO STD DEV = 1.037716321355 UG/L
GEOMET UCL = 50.86853107054608 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214236864

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 50.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 50.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = 4-NITROPHENOL

MAX NONDET = 58.000000000 UG/L
MIN NONDET = 50.000000000 UG/L
STD NONDET = 50.000000000 UG/L

MEAN = 50.5517241379 UG/L
STD DEV = 2.027163925062 UG/L
UCL = 51.28953652351624 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307

TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 50.514421403008 UG/L
GEO STD DEV = 1.038325126842 UG/L
GEOMET UCL = 50.89233318871878 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609218563

TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 50.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 50.0000000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

CHEMICAL = ACENAPHTHENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.496887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = ACENAPHTHYLENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.496887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = ACETALDEHYDE, CHLORO-

MAX NONDET = 35000.0000000000 UG/L
MIN NONDET = 350.0000000000 UG/L
STD NONDET = 350.0000000000 UG/L

MEAN = 350.0000000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 350.0000000000 UG/L

INSUFFICIENT NUMBER OF DATAPOINTS TO DETERMINE DISTRIBUTION TYPE

GEO MEAN = 350.0000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 351.9599999999987 UG/L

MEDIAN = 175.0000000000 UG/L QUALIFIER = U*
MEDIAN UCL = NOT COMPUTED - INSUFFICIENT DATA

TOTAL # DATA = 2
DETECTS = 0
NONDETECTS = 2
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1
TOTAL # STATISTICAL DATA = 1

CHEMICAL = ACETONE

MAX DETECT = 1400.0000000000 UG/L
MIN DETECT = 4.0000000000 UG/L
MAX NONDET = 1400.0000000000 UG/L
MIN NONDET = 1.0000000000 UG/L
STD NONDET = 10.0000000000 UG/L

MEAN = 30.5753424658 UG/L
STD DEV = 131.917202946022 UG/L
UCL = 51.97373144310535 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -81.37347254289242

STAT RANGE = -2.460 - 1.413

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 10.938368982672 UG/L
GEO STD DEV = 2.306230741460 UG/L
GEOMET UCL = 11.31246441052522 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -48.753190909709

STAT RANGE = -2.460 - 1.413

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 10.0000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 174
DETECTS = 15
NONDETECTS = 159
DETECT FREQ = 8.62 %

NONDETECTS > 2x NONDETECT MINIMUM = 28
TOTAL # STATISTICAL DATA = 146

***** HOTSPOT ANALYSIS *****

LOCATION = 0974 RESULT = 1400.0000000000 UG/L QUAL = B

HOTSPOTS = 1

CHEMICAL = ALDRIN

MAX NONDET = 0.050000000 UG/L
MIN NONDET = 0.050000000 UG/L
STD NONDET = 0.050000000 UG/L

MEAN = 0.050000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.050000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.050000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 0.43438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.050000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.050000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = ANTHRACENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = AROCLOR-1016

MAX NONDET = 0.5000000000 UG/L
MIN NONDET = 0.5000000000 UG/L
STD NONDET = 0.5000000000 UG/L

MEAN = 0.5000000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 0.50000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.5000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.88438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.5000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.50000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = AROCLOR-1221

MAX NONDET = 0.5000000000 UG/L
MIN NONDET = 0.5000000000 UG/L
STD NONDET = 0.5000000000 UG/L

MEAN = 0.5000000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 0.50000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.5000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.88438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.5000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.50000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = AROCLOR-1232

MAX NONDET = 0.500000000 UG/L
MIN NONDET = 0.500000000 UG/L
STD NONDET = 0.500000000 UG/L

MEAN = 0.500000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.500000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.500000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 0.88438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.50000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = AROCLOR-1242

MAX NONDET = 0.500000000 UG/L
MIN NONDET = 0.500000000 UG/L
STD NONDET = 0.500000000 UG/L

MEAN = 0.500000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.50000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.500000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 0.88438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.50000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = AROCLOR-1248

MAX NONDET = 0.500000000 UG/L
MIN NONDET = 0.500000000 UG/L
STD NONDET = 0.500000000 UG/L

MEAN = 0.500000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 0.500000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = *****

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.500000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.88438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = *****

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.5000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.500000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = AROCLOR-1254

MAX NONDET = 1.000000000 UG/L
MIN NONDET = 1.000000000 UG/L
STD NONDET = 1.000000000 UG/L

MEAN = 1.000000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 1.000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = *****

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1.000000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 1.38438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = *****

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1.0000000000 UG/L QUALIFIER = U
MEDIAN UCL = 1.000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = AROCLOR-1260

MAX NONDET = 1.000000000 UG/L
MIN NONDET = 1.000000000 UG/L
STD NONDET = 1.000000000 UG/L

MEAN = 1.000000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 1.000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1.000000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 1.38438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 1.0000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = BENZENE

MAX DETECT = 3.000000000 UG/L
MIN DETECT = 3.000000000 UG/L
MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 4.1863874346 UG/L
STD DEV = 1.862954652796 UG/L
UCL = 4.45059282335965 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -41.09116769790113

STAT RANGE = -2.402 - 1.483

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 2.869826647088 UG/L
GEO STD DEV = 3.383576250436 UG/L
GEOMET UCL = 3.34968753766607 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -42.028734226602

STAT RANGE = -2.402 - 1.483

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000 UG/L

TOTAL # DATA = 223
DETECTS = 1
NONDETECTS = 222
DETECT FREQ = 0.45 %

NONDETECTS > 2x NONDETECT MINIMUM = 32

TOTAL # STATISTICAL DATA = 191

==== HOTSPOT ANALYSIS =====

NO HOTSPOTS FOUND

=====

CHEMICAL = BENZENE, (CHLOROMETHYL)-

MAX NONDET = 350.000000000 UG/L
MIN NONDET = 3.500000000 UG/L
STD NONDET = 3.500000000 UG/L

MEAN = 3.500000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 3.5000000000000 UG/L

INSUFFICIENT NUMBER OF DATAPOINTS TO DETERMINE DISTRIBUTION TYPE

GEO MEAN = 3.5000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 5.4600000000000 UG/L

MEDIAN = 1.750000000 UG/L QUALIFIER = U*
MEDIAN UCL = NOT COMPUTED - INSUFFICIENT DATA

TOTAL # DATA = 2
DETECTS = 0
NONDETECTS = 2
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1
TOTAL # STATISTICAL DATA = 1

=====

CHEMICAL = BENZENE, 1,2,4-TRIMETHYL

MAX DETECT = 0.120000000 UG/L
MIN DETECT = 0.120000000 UG/L
MAX NONDET = 5.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.100606060 UG/L
STD DEV = 0.003428396515 UG/L
UCL = 0.10177580277488 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.1781209650000334
TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.100554018604 UG/L
GEO STD DEV = 1.031747049038 UG/L
GEOMET UCL = 0.45257806996246 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.1781209650004751
TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.100000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.1000000000000 UG/L

TOTAL # DATA = 34
DETECTS = 1
NONDETECTS = 33
DETECT FREQ = 2.94 %

NONDETECTS > 2x NONDETECT MINIMUM = 1
TOTAL # STATISTICAL DATA = 33

=====

HOTSPOT ANALYSIS

NO HOTSPOTS FOUND

=====

CHEMICAL = BENZENE, 1,3,5-TRIMETHYL-

MAX NONDET = 5.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.100000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.100000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.100000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 0.44119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.100000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.1000000000000 UG/L

TOTAL # DATA = 34
DETECTS = 0
NONDETECTS = 34
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

CHEMICAL = BENZO(a)ANTHRACENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = BENZO(a)PYRENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = BENZO(b)FLUORANTHENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = BENZO(ghi)PERYLENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = BENZO(k)FLUORANTHENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = BENZOIC ACID

MAX DETECT = 14.000000000 UG/L
MIN DETECT = 14.000000000 UG/L
MAX NONDET = 58.000000000 UG/L
MIN NONDET = 50.000000000 UG/L
STD NONDET = 50.000000000 UG/L

MEAN = 48.666666667 UG/L
STD DEV = 7.936253964190 UG/L
UCL = 52.06105855569425 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.3155384672177425
TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 47.392937114984 UG/L
GEO STD DEV = 1.315860666231 UG/L
GEOMET UCL = 47.95574001830620 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2752617599400904
TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 50.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 50.0000000000000 UG/L

TOTAL # DATA = 21
DETECTS = 1
NONDETECTS = 20
DETECT FREQ = 4.76 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = BENZYL ALCOHOL

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.1379310345 UG/L
STD DEV = 0.506790981265 UG/L
UCL = 10.32238413087906 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307
TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.126532843277 UG/L
GEO STD DEV = 1.047283281602 UG/L
GEOMET UCL = 10.50770506463957 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609252613
TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

CHEMICAL = BIS(2-CHLOROETHOXY)METHANE

MAX NONDET = 3000.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 32
DETECTS = 0
NONDETECTS = 32
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 2

TOTAL # STATISTICAL DATA = 30

CHEMICAL = BIS(2-CHLOROETHYL)ETHER

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = BIS(2-CHLOROISOPROPYL)ETHER

MAX NONDET = 500.000000000 UG/L
MIN NONDET = 5.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 9.9677419355 UG/L
STD DEV = 1.031249507300 UG/L
UCL = 10.33076897876199 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.3797305640313108
TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 9.894590440111 UG/L
GEO STD DEV = 1.141569252156 UG/L
GEOMET UCL = 10.29645294513449 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.3287832163812230
TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 32
DETECTS = 0
NONDETECTS = 32
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1
TOTAL # STATISTICAL DATA = 31

CHEMICAL = BIS(2-ETHYLHEXYL)PHTHALATE

MAX DETECT = 8.000000000 UG/L
MIN DETECT = 2.000000000 UG/L
MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 9.800000000 UG/L
STD DEV = 1.579029237644 UG/L
UCL = 10.36504835584616 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.3944154887700524
TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 9.522465674161 UG/L
GEO STD DEV = 1.344943675276 UG/L
GEOMET UCL = 10.00374758731572 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2949778719545968
TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 2
NONDETECTS = 28
DETECT FREQ = 6.67 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 30

==== HOTSPOT ANALYSIS ====
NO HOTSPOTS FOUND

CHEMICAL = BROMOBENZENE

MAX NONDET = 350.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 0.200000000 UG/L

MEAN = 0.200000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 0.200000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.2000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.54119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.200000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.200000000000 UG/L

TOTAL # DATA = 36
DETECTS = 0
NONDETECTS = 36
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 3

TOTAL # STATISTICAL DATA = 33

CHEMICAL = BROMOCHLOROMETHANE

MAX NONDET = 25.000000000 UG/L
MIN NONDET = 0.500000000 UG/L
STD NONDET = 0.500000000 UG/L

MEAN = 0.500000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 0.500000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.5000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.84119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.500000000000 UG/L

TOTAL # DATA = 34
DETECTS = 0
NONDETECTS = 34
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

CHEMICAL = BROMODICHLOROMETHANE

MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.080000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 4.1952331606 UG/L
STD DEV = 1.895631758620 UG/L
UCL = 4.46267625772670 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -40.46963674865210
STAT RANGE = -2.400 - 1.486
DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 2.839594145367 UG/L
GEO STD DEV = 3.464153051369 UG/L
GEOMET UCL = 3.32833032352508 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -41.601747811307
STAT RANGE = -2.400 - 1.486
DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 0
NONDETECTS = 225
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 32
TOTAL # STATISTICAL DATA = 193

CHEMICAL = BROMOFORM

MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.170000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 4.1711891892 UG/L
STD DEV = 1.746807649459 UG/L
UCL = 4.42290778025919 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -40.08320622107949
STAT RANGE = -2.409 - 1.474
DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 3.255769678199 UG/L
GEO STD DEV = 2.478042107768 UG/L
GEOMET UCL = 3.61286066539126 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -40.182583076088
STAT RANGE = -2.409 - 1.474
DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000 UG/L

TOTAL # DATA = 219
DETECTS = 0
NONDETECTS = 219
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 34
TOTAL # STATISTICAL DATA = 185

CHEMICAL = BROMOMETHANE

MAX NONDET = 1400.000000000 UG/L
MIN NONDET = 0.360000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 8.3513978495 UG/L
STD DEV = 3.486072316598 UG/L
UCL = 8.85239584848764 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -40.37641060967670

STAT RANGE = -2.408 - 1.476

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 6.528581509340 UG/L
GEO STD DEV = 2.470884195727 UG/L
GEOMET UCL = 6.88368258741817 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -40.456525433125

STAT RANGE = -2.408 - 1.476

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 220
DETECTS = 0
NONDETECTS = 220
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 34

TOTAL # STATISTICAL DATA = 186

CHEMICAL = BUTYL BENZYL PHTHALATE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = CARBON DISULFIDE

MAX DETECT = 8.000000000 UG/L
MIN DETECT = 8.000000000 UG/L
MAX NONDET = 700.000000000 UG/L
MIN NONDET = 5.000000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 5.0191082803 UG/L
STD DEV = 0.238662343888 UG/L
UCL = 5.05644104440352 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -101.25506946855978
STAT RANGE = -2.443 - 1.433

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 5.014990695728 UG/L
GEO STD DEV = 1.038098550170 UG/L
GEOMET UCL = 5.17737529191197 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -101.255069468671
STAT RANGE = -2.443 - 1.433

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.00000000000000 UG/L

TOTAL # DATA = 189
DETECTS = 1
NONDETECTS = 188
DETECT FREQ = 0.53 %

NONDETECTS > 2x NONDETECT MINIMUM = 32
TOTAL # STATISTICAL DATA = 157

**** HOTSPOT ANALYSIS ****

NO HOTSPOTS FOUND

CHEMICAL = CARBON TETRACHLORIDE

MAX DETECT = 4500.000000000 UG/L
MIN DETECT = 0.100000000 UG/L
MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 189.0340776699 UG/L
STD DEV = 744.948673872725 UG/L
UCL = 290.76402333772080 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -78.59961419673995
STAT RANGE = -2.386 - 1.502

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 5.450136062713 UG/L
GEO STD DEV = 8.362153729258 UG/L
GEOMET UCL = 6.59206902316871 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -30.301976584148
STAT RANGE = -2.386 - 1.502

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.00000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 39
NONDETECTS = 186
DETECT FREQ = 17.33 %

NONDETECTS > 2x NONDETECT MINIMUM = 19
TOTAL # STATISTICAL DATA = 206

**** HOTSPOT ANALYSIS ****

LOCATION = 1074 RESULT = 2000.000000000 UG/L QUAL =
LOCATION = 1074 RESULT = 2200.000000000 UG/L QUAL = E
LOCATION = 1074 RESULT = 2500.000000000 UG/L QUAL = D
LOCATION = 1074 RESULT = 3000.000000000 UG/L QUAL =
LOCATION = 1074 RESULT = 3100.000000000 UG/L QUAL = D

LOCATION = 1074	RESULT =	3100.0000000000	UG/L	QUAL = E
LOCATION = 1074	RESULT =	3400.0000000000	UG/L	QUAL =
LOCATION = 1074	RESULT =	3700.0000000000	UG/L	QUAL =
LOCATION = 1074	RESULT =	3800.0000000000	UG/L	QUAL =
LOCATION = 1074	RESULT =	4200.0000000000	UG/L	QUAL =
LOCATION = 1074	RESULT =	4500.0000000000	UG/L	QUAL =
# HOTSPOTS =	11			

CHEMICAL = CHLOROBENZENE

MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 4.1323437500 UG/L
STD DEV = 1.870410000330 UG/L
UCL = 4.39691477071050 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -42.15370842530962

STAT RANGE = -2.401 - 1.484

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 2.502224774008 UG/L
GEO STD DEV = 4.447392016119 UG/L
GEOMET UCL = 3.13131200354431 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -42.142507539080

STAT RANGE = -2.401 - 1.484

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.00000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 0
NONDETECTS = 225
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 33

TOTAL # STATISTICAL DATA = 192

CHEMICAL = CHLOROETHANE

MAX NONDET = 1400.000000000 UG/L
MIN NONDET = 0.120000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 8.3085263158 UG/L
STD DEV = 3.653591302705 UG/L
UCL = 8.82804268446280 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -41.08347625254117

STAT RANGE = -2.403 - 1.481

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 5.812176622777 UG/L
GEO STD DEV = 3.219923302023 UG/L
GEOMET UCL = 6.27002828780401 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -41.505186660746

STAT RANGE = -2.403 - 1.481

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 223
DETECTS = 0
NONDETECTS = 223
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 33

TOTAL # STATISTICAL DATA = 190

CHEMICAL = CHLOROFORM

MAX DETECT = 170.000000000 UG/L
MIN DETECT = 0.110000000 UG/L
MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 10.3820952381 UG/L
STD DEV = 24.626840533402 UG/L
UCL = 13.71294559764853 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -70.03619542177016

STAT RANGE = -2.382 - 1.506

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 3.381455344785 UG/L
GEO STD DEV = 4.993276645548 UG/L
GEOMET UCL = 4.05681024009189 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -25.860412223331

STAT RANGE = -2.382 - 1.506

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 39
NONDETECTS = 186
DETECT FREQ = 17.33 %

NONDETECTS > 2x NONDETECT MINIMUM = 15

TOTAL # STATISTICAL DATA = 210

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = CHLOROMETHANE

MAX NONDET = 1400.000000000 UG/L
MIN NONDET = 0.180000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 8.3577083333 UG/L
STD DEV = 3.694615304502 UG/L
UCL = 8.88031468278196 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -41.08456220267519

STAT RANGE = -2.401 - 1.484

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 5.869862003857 UG/L
GEO STD DEV = 3.188433108930 UG/L
GEOMET UCL = 6.32086846872130 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -41.705779721162

STAT RANGE = -2.401 - 1.484

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 0
NONDETECTS = 225
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 33

TOTAL # STATISTICAL DATA = 192

CHEMICAL = CHLOROMETHYL METHYL ETHER

MAX NONDET = 7000.000000000 UG/L
MIN NONDET = 700.000000000 UG/L
STD NONDET = 700.000000000 UG/L

MEAN = 700.000000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 700.000000000 UG/L

INSUFFICIENT NUMBER OF DATAPOINTS TO DETERMINE DISTRIBUTION TYPE

GEO MEAN = 700.000000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 701.959999999981 UG/L

MEDIAN = 350.000000000 UG/L QUALIFIER = U*
MEDIAN UCL = NOT COMPUTED - INSUFFICIENT DATA

TOTAL # DATA = 2
DETECTS = 0
NONDETECTS = 2
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1
TOTAL # STATISTICAL DATA = 1

CHEMICAL = CHRYSENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703
TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801
TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 30

CHEMICAL = CUMENE

MAX NONDET = 10.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 0.200000000 UG/L

MEAN = 0.200000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.2000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = *****
TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.2000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.54119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = *****
TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.200000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.2000000000000 UG/L

TOTAL # DATA = 34
DETECTS = 0
NONDETECTS = 34
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

CHEMICAL = DI-n-BUTYL PHTHALATE

MAX DETECT = 2.000000000 UG/L
MIN DETECT = 2.000000000 UG/L
MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 9.066666667 UG/L
STD DEV = 2.815828277592 UG/L
UCL = 10.07429787492287 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.5000315414798203
TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 8.167379753200 UG/L
GEO STD DEV = 1.739715195561 UG/L
GEOMET UCL = 8.78992884061248 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.4505223825361555
TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 4
NONDETECTS = 26
DETECT FREQ = 13.33 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

***** HOTSPOT ANALYSIS *****

NO HOTSPOTS FOUND

CHEMICAL = DI-n-OCTYL PHTHALATE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = DIBENZO(a,h)ANTHRACENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = DIBENZOFURAN

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = DIBROMOCHLOROMETHANE

MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.090000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 4.1702604167 UG/L
STD DEV = 1.865590678047 UG/L
UCL = 4.43414974030788 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -41.08912675070215

STAT RANGE = -2.401 - 1.484

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 2.824499402973 UG/L
GEO STD DEV = 3.459683153255 UG/L
GEOMET UCL = 3.31387440793496 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -41.699318320197

STAT RANGE = -2.401 - 1.484

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 0
NONDETECTS = 225
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 33

TOTAL # STATISTICAL DATA = 192

CHEMICAL = DIBROMOMETHANE

MAX NONDET = 200.000000000 UG/L
MIN NONDET = 0.500000000 UG/L
STD NONDET = 0.500000000 UG/L

MEAN = 0.500000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.500000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.500000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 0.84119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.500000000000 UG/L

TOTAL # DATA = 36
DETECTS = 0
NONDETECTS = 36
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 3

TOTAL # STATISTICAL DATA = 33

CHEMICAL = DICHLORODIFLUOROMETHANE

MAX DETECT = 2.820000000 UG/L
MIN DETECT = 0.810000000 UG/L
MAX NONDET = 52.000000000 UG/L
MIN NONDET = 0.500000000 UG/L
STD NONDET = 0.500000000 UG/L

MEAN = 0.5779411765 UG/L
STD DEV = 0.393788383091 UG/L
UCL = 0.71030811154009 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2094346987372203

TEST STAT = 0.933

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.53423167663 UG/L
GEO STD DEV = 1.351027002908 UG/L
GEOMET UCL = 0.98836214685907 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2409677573922708

TEST STAT = 0.933

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.500000000000 UG/L

TOTAL # DATA = 36
DETECTS = 2
NONDETECTS = 34
DETECT FREQ = 5.56 %

NONDETECTS > 2x NONDETECT MINIMUM = 2

TOTAL # STATISTICAL DATA = 34

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = DIELDRIN

MAX NONDET = 0.1000000000 UG/L
MIN NONDET = 0.1000000000 UG/L
STD NONDET = 0.1000000000 UG/L

MEAN = 0.1000000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 0.10000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.1000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.48438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.1000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.10000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = DIETHYL PHTHALATE

MAX DETECT = 6.0000000000 UG/L
MIN DETECT = 2.0000000000 UG/L
MAX NONDET = 12.0000000000 UG/L
MIN NONDET = 7.0000000000 UG/L
STD NONDET = 10.0000000000 UG/L

MEAN = 9.4000000000 UG/L
STD DEV = 2.122891110412 UG/L
UCL = 10.15966682755593 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.5397886970414205

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 8.953484808939 UG/L
GEO STD DEV = 1.449096171488 UG/L
GEOMET UCL = 9.47203721420301 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.4573430141085192

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.0000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 3
NONDETECTS = 27
DETECT FREQ = 10.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = DIMETHYL PHTHALATE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = ENDOSULFAN I

MAX NONDET = 0.050000000 UG/L
MIN NONDET = 0.050000000 UG/L
STD NONDET = 0.050000000 UG/L

MEAN = 0.050000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 0.0500000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.050000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.43438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.050000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.0500000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = ENDOSULFAN II

MAX NONDET = 0.1000000000 UG/L
MIN NONDET = 0.1000000000 UG/L
STD NONDET = 0.1000000000 UG/L

MEAN = 0.1000000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 0.10000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.1000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.48438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.1000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.10000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = ENDOSULFAN SULFATE

MAX NONDET = 0.1000000000 UG/L
MIN NONDET = 0.1000000000 UG/L
STD NONDET = 0.1000000000 UG/L

MEAN = 0.1000000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 0.10000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.1000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.48438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.1000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.10000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = ENDRIN

MAX NONDET = 0.1000000000 UG/L
MIN NONDET = 0.1000000000 UG/L
STD NONDET = 0.1000000000 UG/L

MEAN = 0.1000000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 0.10000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION
NORMAL STAT =

TEST STAT = 0.920
DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.100000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.48438762487084 UG/L
SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION
LOGNORM STAT =

TEST STAT = 0.920
DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.1000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.10000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

CHEMICAL = ENDRIN KETONE

MAX NONDET = 0.1000000000 UG/L
MIN NONDET = 0.1000000000 UG/L
STD NONDET = 0.1000000000 UG/L

MEAN = 0.1000000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 0.10000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION
NORMAL STAT =

TEST STAT = 0.920
DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.100000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.48438762487084 UG/L
SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION
LOGNORM STAT =

TEST STAT = 0.920
DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.1000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.10000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

CHEMICAL = ETHYLBENZENE

MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 4.1759162304 UG/L
STD DEV = 1.875174288109 UG/L
UCL = 4.44185461545954 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -40.83520964116546
STAT RANGE = -2.402 - 1.483

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 2.853367082620 UG/L
GEO STD DEV = 3.391594205712 UG/L
GEOMET UCL = 3.33436508460715 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -41.494646054289
STAT RANGE = -2.402 - 1.483

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.000000000000 UG/L

TOTAL # DATA = 223
DETECTS = 0
NONDETECTS = 223
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 32

TOTAL # STATISTICAL DATA = 191

CHEMICAL = FLUORANTHENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703
TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801
TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = FLUORENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = HEPTACHLOR

MAX NONDET = 0.050000000 UG/L
MIN NONDET = 0.050000000 UG/L
STD NONDET = 0.050000000 UG/L

MEAN = 0.050000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 0.05000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.050000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.43438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.050000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.05000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = HEPTACHLOR EPOXIDE

MAX DETECT = 0.1300000000 UG/L
MIN DETECT = 0.1300000000 UG/L
MAX NONDET = 0.0500000000 UG/L
MIN NONDET = 0.0500000000 UG/L
STD NONDET = 0.0500000000 UG/L

MEAN = 0.0530769231 UG/L
STD DEV = 0.015384615385 UG/L
UCL = 0.05899057884417 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2019851495999997
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.051871704334 UG/L
GEO STD DEV = 1.201718001639 UG/L
GEOMET UCL = 0.51379723274850 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2019851496000617
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.0500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.0500000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 1
NONDETECTS = 25
DETECT FREQ = 3.85 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = HEXACHLOROBENZENE

MAX NONDET = 12.0000000000 UG/L
MIN NONDET = 10.0000000000 UG/L
STD NONDET = 10.0000000000 UG/L

MEAN = 10.1333333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703
TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801
TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.0000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 30

CHEMICAL = HEXACHLOROBUTADIENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.100000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.100000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.100000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 0.44119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.100000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.100000000 UG/L

TOTAL # DATA = 69
DETECTS = 0
NONDETECTS = 69
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 36

TOTAL # STATISTICAL DATA = 33

CHEMICAL = HEXACHLOROCYCLOPENTADIENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = HEXACHLOROETHANE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = INDENO(1,2,3- α)PYRENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = ISOPHORONE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499653841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = METHOXYCHLOR

MAX NONDET = 0.500000000 UG/L
MIN NONDET = 0.500000000 UG/L
STD NONDET = 0.500000000 UG/L

MEAN = 0.500000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 0.5000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.500000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.88438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.5000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = METHYLENE CHLORIDE

MAX DETECT = 620.000000000 UG/L
MIN DETECT = 1.000000000 UG/L
MAX NONDET = 620.000000000 UG/L
MIN NONDET = 1.000000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 16.3397058824 UG/L
STD DEV = 58.509918230041 UG/L
UCL = 24.36887265748501 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -84.51994818728821

STAT RANGE = -2.388 - 1.500

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 5.037079876847 UG/L
GEO STD DEV = 2.762626507609 UG/L
GEOMET UCL = 5.41618806291178 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -35.360229023728

STAT RANGE = -2.388 - 1.500

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.00000000000000 UG/L

TOTAL # DATA = 226
DETECTS = 32
NONDETECTS = 194
DETECT FREQ = 14.16 %

NONDETECTS > 2x NONDETECT MINIMUM = 22

TOTAL # STATISTICAL DATA = 204

**** HOTSPOT ANALYSIS ****

LOCATION = 4387 RESULT = 620.000000000 UG/L QUAL = B

HOTSPOTS = 1

CHEMICAL = N-NITROSO-DI-n-PROPYLAMINE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.1333333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = N-NITROSODIPHENYLAMINE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = NAPHTHALENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 5.3710144928 UG/L
STD DEV = 4.961915871489 UG/L
UCL = 6.54180966400645 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -8.31293517946004

STAT RANGE = -2.657 - 1.170

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 1.547904764237 UG/L
GEO STD DEV = 7.095450199965 UG/L
GEOMET UCL = 3.22212074178253 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -8.780415223433

STAT RANGE = -2.657 - 1.170

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 69
DETECTS = 0
NONDETECTS = 69
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 69

CHEMICAL = NITROBENZENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.496887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.0000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = PENTACHLOROPHENOL

MAX NONDET = 58.000000000 UG/L
MIN NONDET = 50.000000000 UG/L
STD NONDET = 50.000000000 UG/L

MEAN = 50.5517241379 UG/L
STD DEV = 2.027163925062 UG/L
UCL = 51.28953652351624 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307

TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 50.514421403008 UG/L
GEO STD DEV = 1.038325126842 UG/L
GEOMET UCL = 50.89233318871878 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609218563

TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 50.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 50.0000000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

CHEMICAL = PHENANTHRENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = PHENOL

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.1379310345 UG/L
STD DEV = 0.506790981265 UG/L
UCL = 10.32238413087906 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2829813609259307

TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.126532843277 UG/L
GEO STD DEV = 1.047283281602 UG/L
GEOMET UCL = 10.50770506463957 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2829813609252613

TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 29
DETECTS = 0
NONDETECTS = 29
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

CHEMICAL = PROPANE, 1,2-DIBROMO-3-CHLORO-

MAX NONDET = 100.000000000 UG/L
MIN NONDET = 2.000000000 UG/L
STD NONDET = 2.000000000 UG/L

MEAN = 2.000000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 2.000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 2.000000000 UG/L
GEO STD DEV = 1.000000000 UG/L
GEOMET UCL = 2.34119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 2.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 2.000000000 UG/L

TOTAL # DATA = 34
DETECTS = 0
NONDETECTS = 34
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

CHEMICAL = PYRENE

MAX NONDET = 12.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 10.133333333 UG/L
STD DEV = 0.498887651570 UG/L
UCL = 10.31185798667805 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2775600214285703

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 10.122289398748 UG/L
GEO STD DEV = 1.046529013302 UG/L
GEOMET UCL = 10.49678499655841 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2775600214279801

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.000000000 UG/L

TOTAL # DATA = 30
DETECTS = 0
NONDETECTS = 30
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 30

CHEMICAL = STYRENE

MAX DETECT = 0.2000000000 UG/L
MIN DETECT = 0.2000000000 UG/L
MAX NONDET = 700.0000000000 UG/L
MIN NONDET = 0.1000000000 UG/L
STD NONDET = 5.0000000000 UG/L

MEAN = 4.1539267016 UG/L
STD DEV = 1.851325483804 UG/L
UCL = 4.41648283438814 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -42.88419333341707
STAT RANGE = -2.402 - 1.483

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 2.552741022231 UG/L
GEO STD DEV = 4.357237542241 UG/L
GEOMET UCL = 3.17068716345021 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -42.848333210803
STAT RANGE = -2.402 - 1.483

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.0000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000000 UG/L

TOTAL # DATA = 223
DETECTS = 1
NONDETECTS = 222
DETECT FREQ = 0.45 %

NONDETECTS > 2x NONDETECT MINIMUM = 32
TOTAL # STATISTICAL DATA = 191

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = TETRACHLOROETHENE

MAX DETECT = 6000.0000000000 UG/L
MIN DETECT = 0.1000000000 UG/L
MAX NONDET = 150.0000000000 UG/L
MIN NONDET = 0.0400000000 UG/L
STD NONDET = 5.0000000000 UG/L

MEAN = 370.9042790698 UG/L
STD DEV = 1061.379072304459 UG/L
UCL = 512.77976486120394 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -61.53676573223811
STAT RANGE = -2.378 - 1.511

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 7.919942717467 UG/L
GEO STD DEV = 14.312307221315 UG/L
GEOMET UCL = 9.83308156936794 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -20.741217708416
STAT RANGE = -2.378 - 1.511

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.0000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 71
NONDETECTS = 154
DETECT FREQ = 31.56 %

NONDETECTS > 2x NONDETECT MINIMUM = 10
TOTAL # STATISTICAL DATA = 215

*** HOTSPOT ANALYSIS ***

LOCATION = 0974 RESULT = 1100.0000000000 UG/L QUAL =
LOCATION = 4387 RESULT = 1400.0000000000 UG/L QUAL = E
LOCATION = 4387 RESULT = 1500.0000000000 UG/L QUAL = B
LOCATION = 0974 RESULT = 1500.0000000000 UG/L QUAL = D
LOCATION = 0974 RESULT = 1500.0000000000 UG/L QUAL = D

LOCATION = 0974	RESULT =	1500.0000000000	UG/L	QUAL = D
LOCATION = 0974	RESULT =	1800.0000000000	UG/L	QUAL =
LOCATION = 4387	RESULT =	2000.0000000000	UG/L	QUAL = E
LOCATION = 0974	RESULT =	2000.0000000000	UG/L	QUAL =
LOCATION = 0974	RESULT =	2200.0000000000	UG/L	QUAL = BE
LOCATION = 0974	RESULT =	2200.0000000000	UG/L	QUAL = BE
LOCATION = 0974	RESULT =	2300.0000000000	UG/L	QUAL =
LOCATION = 0974	RESULT =	2500.0000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT =	2900.0000000000	UG/L	QUAL =
LOCATION = 0974	RESULT =	3000.0000000000	UG/L	QUAL = D
LOCATION = 0974	RESULT =	3000.0000000000	UG/L	QUAL =
LOCATION = 0974	RESULT =	3000.0000000000	UG/L	QUAL =
LOCATION = 4387	RESULT =	3200.0000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT =	3200.0000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT =	3200.0000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT =	3400.0000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT =	3600.0000000000	UG/L	QUAL =
LOCATION = 4387	RESULT =	4200.0000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT =	4200.0000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT =	5700.0000000000	UG/L	QUAL =
LOCATION = 4387	RESULT =	5700.0000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT =	6000.0000000000	UG/L	QUAL = D

HOTSPOTS = 27

CHEMICAL = TIC

MAX DETECT = 60.000000000 UG/L
MIN DETECT = 8.700000000 UG/L

MEAN = 28.233333333 UG/L
STD DEV = 22.659263496906 UG/L
UCL = 53.87470381730506 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8542472129891708
TEST STAT = 0.767

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 20.289133287939 UG/L
GEO STD DEV = 2.238990389734 UG/L
GEOMET UCL = 22.82278942822181 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9565718168289985
TEST STAT = 0.767

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 12.350000000 UG/L
MEDIAN UCL = NOT COMPUTED - INSUFFICIENT DATA

TOTAL # DATA = 3
DETECTS = 3
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 3

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = TOLUENE

MAX DETECT = 270.000000000 UG/L
MIN DETECT = 0.140000000 UG/L
MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 12.133550000 UG/L
STD DEV = 37.126996604863 UG/L
UCL = 17.27908920862014 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -80.80833675247463
STAT RANGE = -2.391 - 1.496

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 3.715950223909 UG/L
GEO STD DEV = 4.480961869426 UG/L
GEOMET UCL = 4.33697985463456 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -29.652675691421
STAT RANGE = -2.391 - 1.496

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.00000000000000 UG/L

TOTAL # DATA = 223
DETECTS = 23
NONDETECTS = 200
DETECT FREQ = 10.31 %

NONDETECTS > 2x NONDETECT MINIMUM = 23
TOTAL # STATISTICAL DATA = 200

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = TOTAL XYLENES

MAX DETECT = 2.000000000 UG/L
MIN DETECT = 1.000000000 UG/L
MAX NONDET = 700.000000000 UG/L
MIN NONDET = 2.000000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 4.8782051282 UG/L
STD DEV = 0.613344642293 UG/L
UCL = 4.97445459851749 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -77.66519396057065

STAT RANGE = -2.445 - 1.432

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 4.805459704944 UG/L
GEO STD DEV = 1.227268691952 UG/L
GEOMET UCL = 4.99804956941163 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -78.549573509021

STAT RANGE = -2.445 - 1.432

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U

MEDIAN UCL = 5.0000000000000 UG/L

TOTAL # DATA = 188
DETECTS = 5
NONDETECTS = 183
DETECT FREQ = 2.66 %

NONDETECTS > 2x NONDETECT MINIMUM = 32

TOTAL # STATISTICAL DATA = 156

HOTSPOT ANALYSIS

NO HOTSPOTS FOUND

CHEMICAL = TOXAPHENE

MAX NONDET = 1.000000000 UG/L
MIN NONDET = 1.000000000 UG/L
STD NONDET = 1.000000000 UG/L

MEAN = 1.000000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 1.0000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1.0000000000 UG/L
GEO STD DEV = 1.00000000000 UG/L
GEOMET UCL = 1.38438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1.000000000 UG/L QUALIFIER = U

MEDIAN UCL = 1.0000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = TRICHLOROETHENE

MAX DETECT = 14000.000000000 UG/L
 MIN DETECT = 0.1200000000 UG/L
 MAX NONDET = 5.0000000000 UG/L
 MIN NONDET = 0.0400000000 UG/L
 STD NONDET = 5.0000000000 UG/L

MEAN = 1047.3814666667 UG/L
 STD DEV = 2783.928798597659 UG/L
 UCL = 1411.14816301676092 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -58.05911154006174
 STAT RANGE = -2.369 - 1.520

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 14.030235108077 UG/L
 GEO STD DEV = 24.602668394264 UG/L
 GEOMET UCL = 17.24498377826048 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -13.779406873730
 STAT RANGE = -2.369 - 1.520

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.0000000000 UG/L QUALIFIER = U
 MEDIAN UCL = 5.00000000000000 UG/L

TOTAL # DATA = 225
 # DETECTS = 86
 # NONDETECTS = 139
 DETECT FREQ = 38.22 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
 TOTAL # STATISTICAL DATA = 225

*** HOTSPOT ANALYSIS ***

LOCATION = 0487	RESULT =	610.0000000000	UG/L	QUAL =
LOCATION = 32591	RESULT =	640.0000000000	UG/L	QUAL = D
LOCATION = 32591	RESULT =	680.0000000000	UG/L	QUAL = E
LOCATION = 1074	RESULT =	700.0000000000	UG/L	QUAL =
LOCATION = 1074	RESULT =	790.0000000000	UG/L	QUAL =
LOCATION = 1074	RESULT =	860.0000000000	UG/L	QUAL = D
LOCATION = 0487	RESULT =	880.0000000000	UG/L	QUAL =
LOCATION = 6986	RESULT =	890.0000000000	UG/L	QUAL =
LOCATION = 0487	RESULT =	950.0000000000	UG/L	QUAL = E
LOCATION = 1074	RESULT =	1100.0000000000	UG/L	QUAL =
LOCATION = 0487	RESULT =	1200.0000000000	UG/L	QUAL = D
LOCATION = 1074	RESULT =	1200.0000000000	UG/L	QUAL =
LOCATION = 4387	RESULT =	1200.0000000000	UG/L	QUAL = E
LOCATION = 0487	RESULT =	1200.0000000000	UG/L	QUAL = D
LOCATION = 1074	RESULT =	1200.0000000000	UG/L	QUAL =
LOCATION = 1074	RESULT =	1200.0000000000	UG/L	QUAL =
LOCATION = 1074	RESULT =	1300.0000000000	UG/L	QUAL = D
LOCATION = 1074	RESULT =	1400.0000000000	UG/L	QUAL =
LOCATION = 1074	RESULT =	1400.0000000000	UG/L	QUAL =
LOCATION = 1074	RESULT =	1700.0000000000	UG/L	QUAL =
LOCATION = 0487	RESULT =	1800.0000000000	UG/L	QUAL = E
LOCATION = 0974	RESULT =	2000.0000000000	UG/L	QUAL =
LOCATION = 4387	RESULT =	2700.0000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT =	2800.0000000000	UG/L	QUAL =
LOCATION = 0974	RESULT =	4000.0000000000	UG/L	QUAL =
LOCATION = 0974	RESULT =	4400.0000000000	UG/L	QUAL = E
LOCATION = 0974	RESULT =	4400.0000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT =	4700.0000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT =	4700.0000000000	UG/L	QUAL = E
LOCATION = 4387	RESULT =	5300.0000000000	UG/L	QUAL =
LOCATION = 4387	RESULT =	5800.0000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT =	5800.0000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT =	5800.0000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT =	7500.0000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT =	8400.0000000000	UG/L	QUAL =
LOCATION = 4387	RESULT =	8700.0000000000	UG/L	QUAL =
LOCATION = 0974	RESULT =	8800.0000000000	UG/L	QUAL = D
LOCATION = 0974	RESULT =	8800.0000000000	UG/L	QUAL = D
LOCATION = 0974	RESULT =	8800.0000000000	UG/L	QUAL = D
LOCATION = 0974	RESULT =	9800.0000000000	UG/L	QUAL =
LOCATION = 0974	RESULT =	11000.0000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT =	11000.0000000000	UG/L	QUAL = D
LOCATION = 4387	RESULT =	11000.0000000000	UG/L	QUAL = E
LOCATION = 0974	RESULT =	12000.0000000000	UG/L	QUAL = E

LOCATION = 0974 RESULT = 12000.0000000000 UG/L QUAL =
LOCATION = 0974 RESULT = 13000.0000000000 UG/L QUAL = D
LOCATION = 0974 RESULT = 13000.0000000000 UG/L QUAL = E
LOCATION = 0974 RESULT = 14000.0000000000 UG/L QUAL =
HOTSPOTS = 48

CHEMICAL = TRICHLOROFLUOROMETHANE

MAX DETECT = 10.2000000000 UG/L
MIN DETECT = 1.1000000000 UG/L
MAX NONDET = 25.0000000000 UG/L
MIN NONDET = 0.5000000000 UG/L
STD NONDET = 0.5000000000 UG/L

MEAN = 1.5515151515 UG/L
STD DEV = 2.866432817677 UG/L
UCL = 2.52951968699230 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.3973574254826714
TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.724371060257 UG/L
GEO STD DEV = 2.558265424924 UG/L
GEOMET UCL = 1.59723128328407 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.4256058005210499
TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.5000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.50000000000000 UG/L

TOTAL # DATA = 36
DETECTS = 5
NONDETECTS = 31
DETECT FREQ = 13.89 %

NONDETECTS > 2x NONDETECT MINIMUM = 3
TOTAL # STATISTICAL DATA = 33

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = VINYL ACETATE

MAX DETECT = 8.000000000 UG/L
MIN DETECT = 8.000000000 UG/L
MAX NONDET = 1400.000000000 UG/L
MIN NONDET = 10.000000000 UG/L
STD NONDET = 10.000000000 UG/L

MEAN = 9.986111111 UG/L
STD DEV = 0.166086954765 UG/L
UCL = 10.01323864705611 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -96.27421267219245
STAT RANGE = -2.464 - 1.409

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 9.984515920273 UG/L
GEO STD DEV = 1.018703373780 UG/L
GEOMET UCL = 10.15090413799029 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -96.274212673066
STAT RANGE = -2.464 - 1.409

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 176
DETECTS = 1
NONDETECTS = 175
DETECT FREQ = 0.57 %

NONDETECTS > 2x NONDETECT MINIMUM = 32
TOTAL # STATISTICAL DATA = 144

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = VINYL CHLORIDE

MAX NONDET = 1400.000000000 UG/L
MIN NONDET = 0.1400000000 UG/L
STD NONDET = 10.0000000000 UG/L

MEAN = 8.2939896373 UG/L
STD DEV = 3.754664544863 UG/L
UCL = 8.82371230622705 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -41.65288276775990
STAT RANGE = -2.400 - 1.486

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 5.019426786475 UG/L
GEO STD DEV = 4.461746684944 UG/L
GEOMET UCL = 5.64890735225048 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -42.198789056339
STAT RANGE = -2.400 - 1.486

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 10.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 10.00000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 0
NONDETECTS = 225
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 32
TOTAL # STATISTICAL DATA = 193

CHEMICAL = alpha-BHC

MAX DETECT = 0.1200000000 UG/L
MIN DETECT = 0.0820000000 UG/L
MAX NONDET = 0.0500000000 UG/L
MIN NONDET = 0.0500000000 UG/L
STD NONDET = 0.0500000000 UG/L

MEAN = 0.0539230769 UG/L
STD DEV = 0.014575857481 UG/L
UCL = 0.05952585616059 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2982110749795313
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.052705597191 UG/L
GEO STD DEV = 1.209294149488 UG/L
GEOMET UCL = 0.51754330308350 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.3063768419078695
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.0500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.05000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 2
NONDETECTS = 24
DETECT FREQ = 7.69 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = alpha-CHLORDANE

MAX NONDET = 0.5000000000 UG/L
MIN NONDET = 0.5000000000 UG/L
STD NONDET = 0.5000000000 UG/L

MEAN = 0.5000000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 0.50000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.500000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.88438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.5000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.50000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = beta-BHC

MAX DETECT = 0.0550000000 UG/L
MIN DETECT = 0.0550000000 UG/L
MAX NONDET = 0.0500000000 UG/L
MIN NONDET = 0.0500000000 UG/L
STD NONDET = 0.0500000000 UG/L

MEAN = 0.0501923077 UG/L
STD DEV = 0.000961538462 UG/L
UCL = 0.05056191117776 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2019851495999772
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.050183625166 UG/L
GEO STD DEV = 1.018497885644 UG/L
GEOMET UCL = 0.44168160836471 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2019851496059493
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.0500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.05000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 1
NONDETECTS = 25
DETECT FREQ = 3.85 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

HOTSPOT ANALYSIS

NO HOTSPOTS FOUND

CHEMICAL = cis-1,2-DICHLOROETHENE

MAX DETECT = 0.8600000000 UG/L
MIN DETECT = 0.1800000000 UG/L
MAX NONDET = 5.0000000000 UG/L
MIN NONDET = 0.1000000000 UG/L
STD NONDET = 0.1000000000 UG/L

MEAN = 0.1254545455 UG/L
STD DEV = 0.130571956456 UG/L
UCL = 0.17000467927673 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.2040972265149949
TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.108655988046 UG/L
GEO STD DEV = 1.461289684502 UG/L
GEOMET UCL = 0.60723663862882 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.2381243378523487
TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.1000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.10000000000000 UG/L

TOTAL # DATA = 34
DETECTS = 2
NONDETECTS = 32
DETECT FREQ = 5.88 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

HOTSPOT ANALYSIS

NO HOTSPOTS FOUND

CHEMICAL = cis-1,3-DICHLOROPROPENE

MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 4.1534031414 UG/L
STD DEV = 1.852457385818 UG/L
UCL = 4.41611980122710 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -42.89446673049896

STAT RANGE = -2.402 - 1.483

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 2.543493805149 UG/L
GEO STD DEV = 4.388336323602 UG/L
GEOMET UCL = 3.16585039490430 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -42.894466730499

STAT RANGE = -2.402 - 1.483

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.00000000000000 UG/L

TOTAL # DATA = 223
DETECTS = 0
NONDETECTS = 223
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 32

TOTAL # STATISTICAL DATA = 191

CHEMICAL = delta-BHC

MAX NONDET = 0.050000000 UG/L
MIN NONDET = 0.050000000 UG/L
STD NONDET = 0.050000000 UG/L

MEAN = 0.050000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 0.0500000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = *****

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.050000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.43438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = *****

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.050000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.05000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = gamma-BHC (LINDANE)

MAX NONDET = 0.050000000 UG/L
MIN NONDET = 0.050000000 UG/L
STD NONDET = 0.050000000 UG/L

MEAN = 0.050000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 0.0500000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.05000000000 UG/L
GEO STD DEV = 1.00000000000 UG/L
GEOMET UCL = 0.43438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.0500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.0500000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = gamma-CHLORDANE

MAX NONDET = 0.500000000 UG/L
MIN NONDET = 0.500000000 UG/L
STD NONDET = 0.500000000 UG/L

MEAN = 0.500000000 UG/L
STD DEV = 0.000000000000 UG/L
UCL = 0.5000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.50000000000 UG/L
GEO STD DEV = 1.00000000000 UG/L
GEOMET UCL = 0.88438762487084 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.5000000000000 UG/L

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = n-BUTYLBENZENE

MAX NONDET = 10.0000000000 UG/L
MIN NONDET = 0.2000000000 UG/L
STD NONDET = 0.2000000000 UG/L

MEAN = 0.2000000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 0.20000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.200000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.54119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.2000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.20000000000000 UG/L

TOTAL # DATA = 34
DETECTS = 0
NONDETECTS = 34
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

CHEMICAL = n-PROPYLBENZENE

MAX NONDET = 10.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 0.200000000 UG/L

MEAN = 0.200000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.200000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = *****

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.2000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.54119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = *****

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.200000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.200000000000 UG/L

TOTAL # DATA = 34
DETECTS = 0
NONDETECTS = 34
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

CHEMICAL = o-CHLOROTOLUENE

MAX NONDET = 500.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 0.200000000 UG/L

MEAN = 0.200000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.200000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = *****

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.2000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.54119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = *****

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.200000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.200000000000 UG/L

TOTAL # DATA = 36
DETECTS = 0
NONDETECTS = 36
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 3

TOTAL # STATISTICAL DATA = 33

CHEMICAL = p-CHLOROTOLUENE

MAX DETECT = 0.6000000000 UG/L
MIN DETECT = 0.6000000000 UG/L
MAX NONDET = 150.0000000000 UG/L
MIN NONDET = 0.2000000000 UG/L
STD NONDET = 0.2000000000 UG/L

MEAN = 0.2121212121 UG/L
STD DEV = 0.068567930297 UG/L
UCL = 0.23551605549765 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.1781209650000001
TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.206770327443 UG/L
GEO STD DEV = 1.207224504731 UG/L
GEOMET UCL = 0.61866591895518 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.1781209650000097
TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.2000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.20000000000000 UG/L

TOTAL # DATA = 36
DETECTS = 1
NONDETECTS = 35
DETECT FREQ = 2.78 %

NONDETECTS > 2x NONDETECT MINIMUM = 3

TOTAL # STATISTICAL DATA = 33

==== HOTSPOT ANALYSIS =====

NO HOTSPOTS FOUND

CHEMICAL = p-CYMENE

MAX NONDET = 10.0000000000 UG/L
MIN NONDET = 0.2000000000 UG/L
STD NONDET = 0.2000000000 UG/L

MEAN = 0.2000000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 0.20000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =
TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.200000000000 UG/L
GEO STD DEV = 1.000000000000 UG/L
GEOMET UCL = 0.54119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =
TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.2000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.20000000000000 UG/L

TOTAL # DATA = 34
DETECTS = 0
NONDETECTS = 34
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

CHEMICAL = *sec*-BUTYLBENZENE

MAX NONDET = 10.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 0.200000000 UG/L

MEAN = 0.200000000 UG/L
STD DEV = 0.000000000 UG/L
UCL = 0.2000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.2000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.54119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.200000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.2000000000000 UG/L

TOTAL # DATA = 34
DETECTS = 0
NONDETECTS = 34
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

CHEMICAL = *sec*-DICHLOROPROPANE

MAX NONDET = 25.000000000 UG/L
MIN NONDET = 0.500000000 UG/L
STD NONDET = 0.500000000 UG/L

MEAN = 0.500000000 UG/L
STD DEV = 0.0000000000 UG/L
UCL = 0.5000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.5000000000 UG/L
GEO STD DEV = 1.0000000000 UG/L
GEOMET UCL = 0.85784540423671 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.500000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.5000000000000 UG/L

TOTAL # DATA = 31
DETECTS = 0
NONDETECTS = 31
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 30

CHEMICAL = tert-BUTYLBENZENE

MAX DETECT = 4.000000000 UG/L
MIN DETECT = 4.000000000 UG/L
MAX NONDET = 10.000000000 UG/L
MIN NONDET = 0.200000000 UG/L
STD NONDET = 0.200000000 UG/L

MEAN = 0.3151515152 UG/L
STD DEV = 0.651395337820 UG/L
UCL = 0.5374025272765 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.1781209650000000
TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.219005563239 UG/L
GEO STD DEV = 1.671176558313 UG/L
GEOMET UCL = 0.78919797923958 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.1781209650000018
TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.2000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.2000000000000000 UG/L

TOTAL # DATA = 34
DETECTS = 1
NONDETECTS = 33
DETECT FREQ = 2.94 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 33

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = trans-1,2-DICHLOROETHENE

MAX NONDET = 170.000000000 UG/L
MIN NONDET = 0.100000000 UG/L
STD NONDET = 0.100000000 UG/L

MEAN = 0.1000000000 UG/L
STD DEV = 0.00000000000 UG/L
UCL = 0.1000000000000000 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.10000000000 UG/L
GEO STD DEV = 1.00000000000 UG/L
GEOMET UCL = 0.44119220567317 UG/L

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT =

TEST STAT = 0.931

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 0.1000000000 UG/L QUALIFIER = U
MEDIAN UCL = 0.1000000000000000 UG/L

TOTAL # DATA = 46
DETECTS = 0
NONDETECTS = 46
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 13

TOTAL # STATISTICAL DATA = 33

CHEMICAL = trans-1,3-DICHLOROPROPENE

MAX NONDET = 700.000000000 UG/L
MIN NONDET = 0.080000000 UG/L
STD NONDET = 5.000000000 UG/L

MEAN = 4.152227979 UG/L
STD DEV = 1.886444612081 UG/L
UCL = 4.41837491803406 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

LOGNORM STAT = -41.45636380471379

STAT RANGE = -2.400 - 1.486

DISTRIBUTION IS NOT NORMAL - NORMAL STAT NOT WITHIN STAT RANGE

GEO MEAN = 2.513188600446 UG/L
GEO STD DEV = 4.456749288491 UG/L
GEOMET UCL = 3.14196411410444 UG/L

D'AGOSTINO'S GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = -42.132425574342

STAT RANGE = -2.400 - 1.486

DISTRIBUTION IS NOT LOGNORMAL - LOGNORM STAT NOT IN STAT RANGE

MEDIAN = 5.000000000 UG/L QUALIFIER = U
MEDIAN UCL = 5.0000000000000 UG/L

TOTAL # DATA = 225
DETECTS = 0
NONDETECTS = 225
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 32

TOTAL # STATISTICAL DATA = 193

APPENDIX A2
SUMMARY STATISTICS - SURFACE SOIL

ORGANICS

SURFACE SOIL - ORGANICS/PESTICIDES/PCBs - 8/13/92

CHEMICAL = 1,2,4-TRICHLOROBENZENE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.0000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 1,2-DICHLOROBENZENE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.0000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 1,3-DICHLOROBENZENE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 1,4-DICHLOROBENZENE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 2,4,5-TRICHLOROPHENOL

MAX NONDET = 2300.000000000 UG/KG
MIN NONDET = 1600.000000000 UG/KG
STD NONDET = 1700.000000000 UG/KG

MEAN = 1861.9047619048 UG/KG
STD DEV = 221.415770239289 UG/KG
UCL = 1956.60585110808779 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7693848288621672

TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1849.638441330035 UG/KG
GEO STD DEV = 1.119683669579 UG/KG
GEOMET UCL = 1850.11733794592533 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7886812501082315

TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1800.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 1849.09241810567232 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = 2,4,6-TRICHLOROPHENOL

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 383.333333333 UG/KG
STD DEV = 45.074893585521 UG/KG
UCL = 402.61218376778800 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7225720560000027

TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 380.882507180097 UG/KG
GEO STD DEV = 1.117536092871 UG/KG
GEOMET UCL = 381.36048526225659 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7403446287036626

TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 374.90924181056721 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = 2,4-DICHLOROPHENOL

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 383.333333333 UG/KG
STD DEV = 45.074893585521 UG/KG
UCL = 402.61218376778800 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7225720560000027
TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 380.882507180097 UG/KG
GEO STD DEV = 1.117536092871 UG/KG
GEOMET UCL = 381.36048526225659 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7403446287036626
TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 374.90924181056721 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = 2,4-DIMETHYLPHENOL

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 383.333333333 UG/KG
STD DEV = 45.074893585521 UG/KG
UCL = 402.61218376778800 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7225720560000027
TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 380.882507180097 UG/KG
GEO STD DEV = 1.117536092871 UG/KG
GEOMET UCL = 381.36048526225659 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7403446287036626
TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 374.90924181056721 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = 2,4-DINITROPHENOL

MAX NONDET = 2300.000000000 UG/KG
MIN NONDET = 1600.000000000 UG/KG
STD NONDET = 1700.000000000 UG/KG

MEAN = 1861.9047619048 UG/KG
STD DEV = 221.415770239289 UG/KG
UCL = 1956.60585110808779 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7693848288621672
TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1849.638441330035 UG/KG
GEO STD DEV = 1.119683669579 UG/KG
GEOMET UCL = 1850.11733794592533 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7886812501082315
TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1800.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 1849.09241810567232 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = 2,4-DINITROTOLUENE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 2,6-DINITROTOLUENE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 2-CHLORONAPHTHALENE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

=====

CHEMICAL = 2-CHLOROPHENOL

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 383.333333333 UG/KG
STD DEV = 45.074893585521 UG/KG
UCL = 402.6121837677890 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7225720560000027

TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 380.882507180097 UG/KG
GEO STD DEV = 1.117536092871 UG/KG
GEOMET UCL = 381.36048526225659 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7403446287036626

TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 374.90924181056721 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

=====

CHEMICAL = 2-METHYLNAPHTHALENE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

=====

CHEMICAL = 2-METHYLPHENOL

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 383.333333333 UG/KG
STD DEV = 45.074893585521 UG/KG
UCL = 402.61218376778800 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7225720560000027

TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 380.882507180097 UG/KG

GEO STD DEV = 1.117536092871 UG/KG

GEOMET UCL = 381.36048526225659 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7403446287036626

TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U

MEDIAN UCL = 374.90924181056721 UG/KG

TOTAL # DATA = 21

DETECTS = 0

NONDETECTS = 21

DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = 2-NITROANILINE

MAX NONDET = 2300.000000000 UG/KG
MIN NONDET = 1600.000000000 UG/KG
STD NONDET = 1800.000000000 UG/KG

MEAN = 1846.1538461538 UG/KG
STD DEV = 202.353022122552 UG/KG
UCL = 1923.93584371297084 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7404508623410355

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1835.946838246135 UG/KG

GEO STD DEV = 1.108734593524 UG/KG

GEOMET UCL = 1836.37302210315147 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7638722440069516

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1800.000000000 UG/KG QUALIFIER = U

MEDIAN UCL = 1800.0000000000000 UG/KG

TOTAL # DATA = 26

DETECTS = 0

NONDETECTS = 26

DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 2-NITROPHENOL

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 383.333333333 UG/KG
STD DEV = 45.074893585521 UG/KG
UCL = 402.61218376778800 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7225720560000027

TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 380.882507180097 UG/KG
GEO STD DEV = 1.117536092871 UG/KG
GEOMET UCL = 381.36048526225659 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7403446287036626

TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 374.90924181056721 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = 3,3'-DICHLOROBENZIDINE

MAX NONDET = 940.000000000 UG/KG
MIN NONDET = 670.000000000 UG/KG
STD NONDET = 690.000000000 UG/KG

MEAN = 756.1538461538 UG/KG
STD DEV = 85.713158628825 UG/KG
UCL = 789.10092361935801 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7143930019027884

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 751.724430197671 UG/KG
GEO STD DEV = 1.111808140181 UG/KG
GEOMET UCL = 752.15179548798710 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7390623327978947

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 720.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 740.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 3-NITROANILINE

MAX NONDET = 2300.000000000 UG/KG
MIN NONDET = 1600.000000000 UG/KG
STD NONDET = 1800.000000000 UG/KG

MEAN = 1846.1538461538 UG/KG
STD DEV = 202.353022122552 UG/KG
UCL = 1923.93584371297084 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7404508623410355

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1835.946838246135 UG/KG
GEO STD DEV = 1.108734593524 UG/KG
GEOMET UCL = 1836.37302210315147 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7638722440069516

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1800.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 1800.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 4,4'-DDD

MAX NONDET = 23.000000000 UG/KG
MIN NONDET = 16.000000000 UG/KG
STD NONDET = 17.000000000 UG/KG

MEAN = 18.2692307692 UG/KG
STD DEV = 1.932668388677 UG/KG
UCL = 19.01212458081731 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7397825946376221

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 18.175077971038 UG/KG
GEO STD DEV = 1.104791751096 UG/KG
GEOMET UCL = 18.59974624821844 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7593725767194065

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 17.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 18.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 4,4'-DDE

MAX NONDET = 23.000000000 UG/KG
MIN NONDET = 16.000000000 UG/KG
STD NONDET = 17.000000000 UG/KG

MEAN = 18.2692307692 UG/KG
STD DEV = 1.932668388677 UG/KG
UCL = 19.01212458081731 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7397825946376221

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 18.175077971038 UG/KG
GEO STD DEV = 1.104791751096 UG/KG
GEOMET UCL = 18.59974624821844 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7593725767194065

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 17.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 18.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 4,4'-DDT

MAX NONDET = 23.000000000 UG/KG
MIN NONDET = 16.000000000 UG/KG
STD NONDET = 17.000000000 UG/KG

MEAN = 18.2692307692 UG/KG
STD DEV = 1.932668388677 UG/KG
UCL = 19.01212458081731 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7397825946376221

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 18.175077971038 UG/KG
GEO STD DEV = 1.104791751096 UG/KG
GEOMET UCL = 18.59974624821844 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7593725767194065

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 17.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 18.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 4,6-DINITRO-2-METHYLPHENOL

MAX NONDET = 2300.000000000 UG/KG
MIN NONDET = 1600.000000000 UG/KG
STD NONDET = 1700.000000000 UG/KG

MEAN = 1861.9047619048 UG/KG
STD DEV = 221.415770239289 UG/KG
UCL = 1956.60585110808779 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7693848288621672
TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1849.638441330035 UG/KG
GEO STD DEV = 1.119683669579 UG/KG
GEOMET UCL = 1850.11733794592533 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7886812501082315
TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1800.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 1849.09241810567232 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = 4-BROMOPHENYL PHENYL ETHER

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 4-CHLORO-3-METHYLPHENOL

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 383.333333333 UG/KG
STD DEV = 45.074893585521 UG/KG
UCL = 402.61218376778800 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7225720560000027

TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 380.882507180097 UG/KG
GEO STD DEV = 1.117536092871 UG/KG
GEOMET UCL = 381.36048526225659 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7403446287036626

TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 374.90924181056721 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = 4-CHLOROANILINE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 4-CHLOROPHENYL PHENYL ETHER

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 4-METHYLPHENOL

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 383.333333333 UG/KG
STD DEV = 45.074893585521 UG/KG
UCL = 402.61218376778800 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7225720560000027

TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 380.882507180097 UG/KG
GEO STD DEV = 1.117536092871 UG/KG
GEOMET UCL = 381.36048526225659 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7403446287036626

TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 374.90924181056721 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = 4-NITROANILINE

MAX NONDET = 2300.000000000 UG/KG
MIN NONDET = 1600.000000000 UG/KG
STD NONDET = 1800.000000000 UG/KG

MEAN = 1846.1538461538 UG/KG
STD DEV = 202.353022122552 UG/KG
UCL = 1923.93584371297084 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7404508623410355

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1835.946838246135 UG/KG
GEO STD DEV = 1.108734593524 UG/KG
GEOMET UCL = 1836.37302210315147 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7638722440069516

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1800.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 1800.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = 4-NITROPHENOL

MAX NONDET = 2300.000000000 UG/KG
MIN NONDET = 1600.000000000 UG/KG
STD NONDET = 1700.000000000 UG/KG

MEAN = 1861.9047619048 UG/KG
STD DEV = 221.415770239289 UG/KG
UCL = 1956.60585110808779 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7693848288621672

TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1849.638441330035 UG/KG
GEO STD DEV = 1.119683669579 UG/KG
GEOMET UCL = 1850.11733794592533 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7886812501082315

TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1800.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 1849.09241810567232 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = ACENAPHTHENE

MAX DETECT = 240.000000000 UG/KG
MIN DETECT = 45.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 326.7307692308 UG/KG
STD DEV = 118.577971002630 UG/KG
UCL = 372.31067386647362 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8147620267554941

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 288.262628276478 UG/KG
GEO STD DEV = 1.818949468909 UG/KG
GEOMET UCL = 288.96180994259203 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6792350179381371

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 350.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 6
NONDETECTS = 20
DETECT FREQ = 23.08 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = ACENAPHTHYLENE

MAX DETECT = 110.000000000 UG/KG
MIN DETECT = 110.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 368.4615384615 UG/KG
STD DEV = 66.488420489372 UG/KG
UCL = 394.01886449486204 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6854700771650283

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 359.200026073148 UG/KG
GEO STD DEV = 1.294589351059 UG/KG
GEOMET UCL = 359.69765019898432 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.5179670631311083

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 1
NONDETECTS = 25
DETECT FREQ = 3.85 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = ALDRIN

MAX NONDET = 11.000000000 UG/KG
MIN NONDET = 8.100000000 UG/KG
STD NONDET = 8.600000000 UG/KG

MEAN = 9.1230769231 UG/KG
STD DEV = 0.946779030474 UG/KG
UCL = 9.48700706587816 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483274
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 9.077842597842 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 9.50168899120820 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272386074
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 8.7000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 8.94970391233209 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = ANTHRACENE

MAX DETECT = 330.000000000 UG/KG
MIN DETECT = 47.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 332.4615384615 UG/KG
STD DEV = 113.471186030514 UG/KG
UCL = 376.07845815108321 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8014406836385196
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 297.007481957064 UG/KG
GEO STD DEV = 1.770109303810 UG/KG
GEOMET UCL = 297.68789006811710 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6521680613027019
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 350.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 6
NONDETECTS = 20
DETECT FREQ = 23.08 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = AROCLOR-1016

MAX NONDET = 110.000000000 UG/KG
MIN NONDET = 81.000000000 UG/KG
STD NONDET = 86.000000000 UG/KG

MEAN = 91.2307692308 UG/KG
STD DEV = 9.467790304735 UG/KG
UCL = 94.87007065878156 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483162
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 90.778425978419 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 91.20227237178570 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272381465
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 87.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 89.49703912332093 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = AROCLOR-1221

MAX NONDET = 110.000000000 UG/KG
MIN NONDET = 81.000000000 UG/KG
STD NONDET = 86.000000000 UG/KG

MEAN = 91.2307692308 UG/KG
STD DEV = 9.467790304735 UG/KG
UCL = 94.87007065878156 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483162
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 90.778425978419 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 91.20227237178570 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272381465
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 87.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 89.49703912332093 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = AROCLOR-1232

MAX NONDET = 110.000000000 UG/KG
MIN NONDET = 81.000000000 UG/KG
STD NONDET = 86.000000000 UG/KG

MEAN = 91.2307692308 UG/KG
STD DEV = 9.467790304735 UG/KG
UCL = 94.87007065878156 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483162

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 90.778425978419 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 91.20227237178570 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272381465

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 87.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 89.49703912332093 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = AROCLOR-1242

MAX NONDET = 110.000000000 UG/KG
MIN NONDET = 81.000000000 UG/KG
STD NONDET = 86.000000000 UG/KG

MEAN = 91.2307692308 UG/KG
STD DEV = 9.467790304735 UG/KG
UCL = 94.87007065878156 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483162

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 90.778425978419 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 91.20227237178570 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272381465

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 87.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 89.49703912332093 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = AROCLOR-1248

MAX DETECT = 670.0000000000 UG/KG
MIN DETECT = 670.0000000000 UG/KG
MAX NONDET = 110.0000000000 UG/KG
MIN NONDET = 83.0000000000 UG/KG
STD NONDET = 86.0000000000 UG/KG

MEAN = 113.8846153846 UG/KG
STD DEV = 111.606564089793 UG/KG
UCL = 156.78479747508604 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION
NORMAL STAT = 0.2578826491775100
TEST STAT = 0.920
DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 98.463339871485 UG/KG
GEO STD DEV = 1.484555381213 UG/KG
GEOMET UCL = 99.03398458845872 UG/KG
SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION
LOGNORM STAT = 0.3761684454836323
TEST STAT = 0.920
DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 88.0000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 90.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 1
NONDETECTS = 25
DETECT FREQ = 3.85 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = AROCLOR-1254

MAX DETECT = 1200.0000000000 UG/KG
MIN DETECT = 540.0000000000 UG/KG
MAX NONDET = 230.0000000000 UG/KG
MIN NONDET = 170.0000000000 UG/KG
STD NONDET = 170.0000000000 UG/KG

MEAN = 235.0000000000 UG/KG
STD DEV = 205.618204821086 UG/KG
UCL = 314.03709338138339 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION
NORMAL STAT = 0.3428748087113939
TEST STAT = 0.920
DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 203.297188569533 UG/KG
GEO STD DEV = 1.524812741457 UG/KG
GEOMET UCL = 203.88330771759462 UG/KG
SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION
LOGNORM STAT = 0.4602705144026358
TEST STAT = 0.920
DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 180.0000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 180.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 2
NONDETECTS = 24
DETECT FREQ = 7.69 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = AROCLOR-1260

MAX NONDET = 230.000000000 UG/KG
MIN NONDET = 160.000000000 UG/KG
STD NONDET = 170.000000000 UG/KG

MEAN = 182.6923076923 UG/KG
STD DEV = 19.326683886771 UG/KG
UCL = 190.12124580817311 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7397825946376210
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 181.750779710377 UG/KG
GEO STD DEV = 1.104791751096 UG/KG
GEOMET UCL = 182.17544798755799 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7593725767192399
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 170.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 180.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

CHEMICAL = BENZO(a)ANTHRACENE

MAX DETECT = 830.000000000 UG/KG
MIN DETECT = 140.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 350.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 374.6153846154 UG/KG
STD DEV = 139.951386318766 UG/KG
UCL = 428.41096559983646 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8986936976401013
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 349.086665069401 UG/KG
GEO STD DEV = 1.472538548579 UG/KG
GEOMET UCL = 349.65269066461980 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9212620580348091
TEST STAT = 0.920

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 384.97039123320928 UG/KG

TOTAL # DATA = 26
DETECTS = 11
NONDETECTS = 15
DETECT FREQ = 42.31 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = BENZO(a)PYRENE

MAX DETECT = 750.000000000 UG/KG
MIN DETECT = 120.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 350.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 358.4615384615 UG/KG
STD DEV = 122.966296435941 UG/KG
UCL = 405.72826108771335 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8990543432912658

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 334.983831182364 UG/KG
GEO STD DEV = 1.480414949211 UG/KG
GEOMET UCL = 335.55288436851509 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.8604702341027466

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 384.97039123320928 UG/KG

TOTAL # DATA = 26
DETECTS = 12
NONDETECTS = 14
DETECT FREQ = 46.15 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = BENZO(b)FLUORANTHENE

MAX DETECT = 810.000000000 UG/KG
MIN DETECT = 180.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 350.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 368.4615384615 UG/KG
STD DEV = 113.703132616757 UG/KG
UCL = 412.16761554846801 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7855945498393518

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 353.869874587062 UG/KG
GEO STD DEV = 1.322014505229 UG/KG
GEOMET UCL = 354.37804060277170 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.8967391479010827

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 11
NONDETECTS = 15
DETECT FREQ = 42.31 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = BENZO(ghi)PERYLENE

MAX DETECT = 350.000000000 UG/KG
MIN DETECT = 82.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 350.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 320.0769230769 UG/KG
STD DEV = 102.177042083797 UG/KG
UCL = 359.35251359984187 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8422134272949729
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 296.633963972693 UG/KG
GEO STD DEV = 1.547589660326 UG/KG
GEOMET UCL = 297.22883828650015 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7501317060310839
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 350.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 364.97039123320928 UG/KG

TOTAL # DATA = 26
DETECTS = 8
NONDETECTS = 18
DETECT FREQ = 30.77 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = BENZO(k)FLUORANTHENE

MAX DETECT = 740.000000000 UG/KG
MIN DETECT = 120.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 350.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 361.5384615385 UG/KG
STD DEV = 115.781369156644 UG/KG
UCL = 406.04338703287777 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8840739935669835
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 342.121891559895 UG/KG
GEO STD DEV = 1.416570241584 UG/KG
GEOMET UCL = 342.66640363052056 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.8747914571541225
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 10
NONDETECTS = 16
DETECT FREQ = 38.46 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = BENZOIC ACID

MAX NONDET = 2300.000000000 UG/KG
MIN NONDET = 1600.000000000 UG/KG
STD NONDET = 1700.000000000 UG/KG

MEAN = 1861.9047619048 UG/KG
STD DEV = 221.415770239289 UG/KG
UCL = 1956.60585110808779 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7693848288621672
TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1849.638441330035 UG/KG
GEO STD DEV = 1.119683669579 UG/KG
GEOMET UCL = 1850.11733794592533 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7886812501082315
TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1800.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 1849.09241810567232 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = BENZYL ALCOHOL

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 383.333333333 UG/KG
STD DEV = 45.074893585521 UG/KG
UCL = 402.61218376778800 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7225720560000027
TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 380.882507180097 UG/KG
GEO STD DEV = 1.117536092871 UG/KG
GEOMET UCL = 381.36048526225659 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7403446287036626
TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 374.90924181056721 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = BIS(2-CHLOROETHOXY)METHANE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = BIS(2-CHLOROETHYL)ETHER

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

=====

CHEMICAL = BIS(2-CHLOROISOPROPYL)ETHER

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

=====

CHEMICAL = BIS(2-ETHYLHEXYL)PHTHALATE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 46.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 325.9615384615 UG/KG
STD DEV = 125.421897477529 UG/KG
UCL = 374.17216373972008 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7618220068999437

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 280.596711619388 UG/KG
GEO STD DEV = 1.934510638523 UG/KG
GEOMET UCL = 281.34031356901693 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6466641083297735

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

=====

CHEMICAL = BUTYL BENZYL PHTHALATE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = CHRYSENE

MAX DETECT = 790.000000000 UG/KG
MIN DETECT = 120.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 350.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 375.3846153846 UG/KG
STD DEV = 138.598223132987 UG/KG
UCL = 428.66005718602310 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9293306399932231

TEST STAT = 0.920

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 347.842389852094 UG/KG
GEO STD DEV = 1.508454925524 UG/KG
GEOMET UCL = 348.42222125814135 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9083934501228478

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 414.91117369962785 UG/KG

TOTAL # DATA = 26
DETECTS = 14
NONDETECTS = 12
DETECT FREQ = 53.85 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = DI-n-BUTYL PHTHALATE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 40.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 318.1538461538 UG/KG
STD DEV = 139.591903089986 UG/KG
UCL = 371.81124623380640 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7162758415612518
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 251.824480345141 UG/KG
GEO STD DEV = 2.349800814055 UG/KG
GEOMET UCL = 252.72771469897506 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.5920712300770602
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

CHEMICAL = DI-n-OCTYL PHTHALATE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

=====

CHEMICAL = DIBENZO(a,h)ANTHRACENE

MAX DETECT = 92.000000000 UG/KG
MIN DETECT = 43.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 332.280000000 UG/KG
STD DEV = 124.340989219163 UG/KG
UCL = 381.02166777391187 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7253126064978661

TEST STAT = 0.918

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 284.016024266662 UG/KG
GEO STD DEV = 1.999366036922 UG/KG
GEOMET UCL = 284.79977575313552 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.5941727441151772

TEST STAT = 0.918

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 25
DETECTS = 4
NONDETECTS = 21
DETECT FREQ = 16.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 25

=====
*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND
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CHEMICAL = DIBENZOFURAN

MAX DETECT = 86.000000000 UG/KG
MIN DETECT = 37.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 355.1153846154 UG/KG
STD DEV = 94.682598077462 UG/KG
UCL = 391.51020360698072 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6631779123619066

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 326.002677355011 UG/KG
GEO STD DEV = 1.698614032354 UG/KG
GEOMET UCL = 326.65560356848010 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.4713104645964396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 2
NONDETECTS = 24
DETECT FREQ = 7.69 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

=====
*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND
=====

CHEMICAL = DIELDRIN

MAX NONDET = 23.000000000 UG/KG
MIN NONDET = 16.000000000 UG/KG
STD NONDET = 17.000000000 UG/KG

MEAN = 18.2692307692 UG/KG
STD DEV = 1.932668388677 UG/KG
UCL = 19.01212458081731 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7397825946376221

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 18.175077971038 UG/KG
GEO STD DEV = 1.104791751096 UG/KG
GEOMET UCL = 18.59974624821844 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7593725767194065

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 17.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 18.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = DIETHYL PHTHALATE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

=====

CHEMICAL = DIMETHYL PHTHALATE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

=====

CHEMICAL = ENDOSULFAN I

MAX NONDET = 11.000000000 UG/KG
MIN NONDET = 8.100000000 UG/KG
STD NONDET = 8.600000000 UG/KG

MEAN = 9.1230769231 UG/KG
STD DEV = 0.946779030474 UG/KG
UCL = 9.48700706587816 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483274
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 9.077842597842 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 9.50168899120820 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272386074
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 8.700000000 UG/KG QUALIFIER = U
MEDIAN UCL = 8.94970391233209 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

=====

CHEMICAL = ENDOSULFAN II

MAX NONDET = 23.000000000 UG/KG
MIN NONDET = 16.000000000 UG/KG
STD NONDET = 17.000000000 UG/KG

MEAN = 18.2692307692 UG/KG
STD DEV = 1.932668388677 UG/KG
UCL = 19.01212458081731 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7397825946376221
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 18.175077971038 UG/KG
GEO STD DEV = 1.104791751096 UG/KG
GEOMET UCL = 18.59974624821844 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7593725767194065
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 17.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 18.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = ENDOSULFAN SULFATE

MAX NONDET = 23.000000000 UG/KG
MIN NONDET = 16.000000000 UG/KG
STD NONDET = 17.000000000 UG/KG

MEAN = 18.2692307692 UG/KG
STD DEV = 1.932668388677 UG/KG
UCL = 19.01212458081731 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7397825946376221
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 18.175077971038 UG/KG
GEO STD DEV = 1.104791751096 UG/KG
GEOMET UCL = 18.59974624821844 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7593725767194065
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 17.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 18.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = ENDRIN

MAX NONDET = 23.0000000000 UG/KG
MIN NONDET = 16.0000000000 UG/KG
STD NONDET = 17.0000000000 UG/KG

MEAN = 18.2692307692 UG/KG
STD DEV = 1.932668388677 UG/KG
UCL = 19.01212458081731 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7397825946376221
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 18.175077971038 UG/KG
GEO STD DEV = 1.104791751096 UG/KG
GEOMET UCL = 18.59974624821844 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7593725767194065
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 17.0000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 18.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = ENDRIN KETONE

MAX NONDET = 23.0000000000 UG/KG
MIN NONDET = 16.0000000000 UG/KG
STD NONDET = 17.0000000000 UG/KG

MEAN = 18.2692307692 UG/KG
STD DEV = 1.932668388677 UG/KG
UCL = 19.01212458081731 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7397825946376221
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 18.175077971038 UG/KG
GEO STD DEV = 1.104791751096 UG/KG
GEOMET UCL = 18.59974624821844 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7593725767194065
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 17.0000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 18.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = FLUORANTHENE

MAX DETECT = 1900.000000000 UG/KG
MIN DETECT = 240.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 350.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 627.3076923077 UG/KG
STD DEV = 410.792458288833 UG/KG
UCL = 785.21122966419057 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7528013446964419

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 535.427450638620 UG/KG
GEO STD DEV = 1.693003811530 UG/KG
GEOMET UCL = 536.07822035263200 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9024126054188656

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 470.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 639.94078246641857 UG/KG

TOTAL # DATA = 26
DETECTS = 17
NONDETECTS = 9
DETECT FREQ = 65.38 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = FLUORENE

MAX DETECT = 230.000000000 UG/KG
MIN DETECT = 54.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 333.1153846154 UG/KG
STD DEV = 113.820481772860 UG/KG
UCL = 376.86656926570907 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7896062202718855

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 298.928346961474 UG/KG
GEO STD DEV = 1.735600448186 UG/KG
GEOMET UCL = 299.59549029547696 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6617730005210869

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 5
NONDETECTS = 21
DETECT FREQ = 19.23 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = HEPTACHLOR

MAX NONDET = 11.000000000 UG/KG
MIN NONDET = 8.100000000 UG/KG
STD NONDET = 8.600000000 UG/KG

MEAN = 9.1230769231 UG/KG
STD DEV = 0.946779030474 UG/KG
UCL = 9.48700706587816 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483274
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 9.077842597842 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 9.50168899120820 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272386074
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 8.700000000 UG/KG QUALIFIER = U
MEDIAN UCL = 8.94970391233209 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

CHEMICAL = HEPTACHLOR EPOXIDE

MAX NONDET = 11.000000000 UG/KG
MIN NONDET = 8.100000000 UG/KG
STD NONDET = 8.600000000 UG/KG

MEAN = 9.1230769231 UG/KG
STD DEV = 0.946779030474 UG/KG
UCL = 9.48700706587816 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483274
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 9.077842597842 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 9.50168899120820 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272386074
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 8.700000000 UG/KG QUALIFIER = U
MEDIAN UCL = 8.94970391233209 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

CHEMICAL = HEXACHLOROBENZENE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.692307692 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = HEXACHLOROBUTADIENE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.692307692 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = HEXACHLOROCYCLOPENTADIENE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = HEXACHLOROETHANE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = INDENO(1,2,3-cd)PYRENE

MAX DETECT = 250.000000000 UG/KG
MIN DETECT = 88.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 350.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 305.5384615385 UG/KG
STD DEV = 115.286009148229 UG/KG
UCL = 349.85297677578717 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION
NORMAL STAT = 0.8994458561094781
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 276.927144363871 UG/KG
GEO STD DEV = 1.625513887657 UG/KG
GEOMET UCL = 277.55197178634222 UG/KG
SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION
LOGNORM STAT = 0.831894229734449
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 350.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 10
NONDETECTS = 16
DETECT FREQ = 38.46 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

==== HOTSPOT ANALYSIS ====
NO HOTSPOTS FOUND

CHEMICAL = ISOPHORONE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

CHEMICAL = METHOXYCHLOR

MAX NONDET = 110.000000000 UG/KG
MIN NONDET = 81.000000000 UG/KG
STD NONDET = 86.000000000 UG/KG

MEAN = 91.2307692308 UG/KG
STD DEV = 9.467790304735 UG/KG
UCL = 94.87007065878156 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483162

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 90.778425978419 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 91.20227237178570 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272381465

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 87.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 89.49703912332093 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = N-NITROSO-DI-n-PROPYLAMINE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.6923076923 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = N-NITROSODIPHENYLAMINE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 377.692307692 UG/KG
STD DEV = 42.181630371862 UG/KG
UCL = 393.90640440412750 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6717622203990685

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 375.551955055443 UG/KG
GEO STD DEV = 1.109756015347 UG/KG
GEOMET UCL = 375.97853153436853 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6908780983835396

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = NAPHTHALENE

MAX DETECT = 110.000000000 UG/KG
MIN DETECT = 110.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 368.0769230769 UG/KG
STD DEV = 66.565134716031 UG/KG
UCL = 393.66373710962569 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6862125024057699

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 358.811045312111 UG/KG
GEO STD DEV = 1.294650839677 UG/KG
GEOMET UCL = 359.30869307341140 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.5192431257588381

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 370.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 1
NONDETECTS = 25
DETECT FREQ = 3.85 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = NITROBENZENE

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 383.333333333 UG/KG
STD DEV = 45.074893585521 UG/KG
UCL = 402.61218376778800 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7225720560000027
TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 380.882507180097 UG/KG
GEO STD DEV = 1.117536092871 UG/KG
GEOMET UCL = 381.36048526225659 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7403446287036626
TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 374.90924181056721 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = PENTACHLOROPHENOL

MAX NONDET = 2300.000000000 UG/KG
MIN NONDET = 1600.000000000 UG/KG
STD NONDET = 1700.000000000 UG/KG

MEAN = 1861.9047619048 UG/KG
STD DEV = 221.415770239289 UG/KG
UCL = 1956.60585110808779 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7693848288621672
TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1849.638441330035 UG/KG
GEO STD DEV = 1.119683669579 UG/KG
GEOMET UCL = 1850.11733794592533 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7886812501082315
TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1800.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 1849.09241810567232 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 21

CHEMICAL = PHENANTHRENE

MAX DETECT = 1600.000000000 UG/KG
MIN DETECT = 130.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 350.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 499.2307692308 UG/KG
STD DEV = 314.335967702896 UG/KG
UCL = 620.05762526756268 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7428373770896614
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 430.950919698667 UG/KG
GEO STD DEV = 1.6872296538977 UG/KG
GEOMET UCL = 431.59946989989254 UG/KG
SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION
LOGNORM STAT = 0.9230654622840719

TEST STAT = 0.920
DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 380.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 470.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 15
NONDETECTS = 11
DETECT FREQ = 57.69 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 26

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = PHENOL

MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 340.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 383.333333333 UG/KG
STD DEV = 45.074893585521 UG/KG
UCL = 402.61218376778800 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7225720560000027
TEST STAT = 0.908

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 380.882507180097 UG/KG
GEO STD DEV = 1.117536092871 UG/KG
GEOMET UCL = 381.36048526225659 UG/KG
SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION
LOGNORM STAT = 0.7403446287036626

TEST STAT = 0.908
DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 360.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 374.90924181056721 UG/KG

TOTAL # DATA = 21
DETECTS = 0
NONDETECTS = 21
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 21

CHEMICAL = PYRENE

MAX DETECT = 1800.000000000 UG/KG
MIN DETECT = 220.000000000 UG/KG
MAX NONDET = 470.000000000 UG/KG
MIN NONDET = 350.000000000 UG/KG
STD NONDET = 350.000000000 UG/KG

MEAN = 590.7692307692 UG/KG
STD DEV = 373.918163371891 UG/KG
UCL = 734.49874548381899 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7164490805519771

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 512.781139293709 UG/KG
GEO STD DEV = 1.636226007661 UG/KG
GEOMET UCL = 513.41008432254557 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.8713180685953418

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 460.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 550.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 15
NONDETECTS = 11
DETECT FREQ = 57.69 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

HOTSPOT ANALYSIS

NO HOTSPOTS FOUND

CHEMICAL = TOXAPHENE

MAX NONDET = 230.000000000 UG/KG
MIN NONDET = 86.000000000 UG/KG
STD NONDET = 170.000000000 UG/KG

MEAN = 179.4615384615 UG/KG
STD DEV = 26.767130775278 UG/KG
UCL = 189.75049228485472 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7783769400227954

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 177.049038373406 UG/KG
GEO STD DEV = 1.191190888572 UG/KG
GEOMET UCL = 177.50691740983245 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6785637812719958

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 170.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 180.0000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = alpha-BHC

MAX NONDET = 11.000000000 UG/KG
MIN NONDET = 8.100000000 UG/KG
STD NONDET = 8.600000000 UG/KG

MEAN = 9.1230769231 UG/KG
STD DEV = 0.946779030474 UG/KG
UCL = 9.48700706587816 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483274
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 9.077842597842 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 9.50168899120820 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272386074
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 8.700000000 UG/KG QUALIFIER = U
MEDIAN UCL = 8.94970391233209 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = alpha-CHLORDANE

MAX NONDET = 110.000000000 UG/KG
MIN NONDET = 81.000000000 UG/KG
STD NONDET = 86.000000000 UG/KG

MEAN = 91.2307692308 UG/KG
STD DEV = 9.467790304735 UG/KG
UCL = 94.87007065878156 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483162
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 90.778425978419 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 91.20227237178570 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272381465
TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 87.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 89.49703912332093 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = beta-BHC

MAX NONDET = 11.000000000 UG/KG
MIN NONDET = 8.100000000 UG/KG
STD NONDET = 8.600000000 UG/KG

MEAN = 9.1230769231 UG/KG
STD DEV = 0.946779030474 UG/KG
UCL = 9.48700706587816 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483274

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 9.077842597842 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 9.50168899120820 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272386074

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 8.7000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 8.94970391233209 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = delta-BHC

MAX NONDET = 11.000000000 UG/KG
MIN NONDET = 8.100000000 UG/KG
STD NONDET = 8.600000000 UG/KG

MEAN = 9.1230769231 UG/KG
STD DEV = 0.946779030474 UG/KG
UCL = 9.48700706587816 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483274

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 9.077842597842 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 9.50168899120820 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272386074

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 8.7000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 8.94970391233209 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = gamma-BHC (LINDANE)

MAX NONDET = 11.000000000 UG/KG
MIN NONDET = 8.100000000 UG/KG
STD NONDET = 8.600000000 UG/KG

MEAN = 9.1230769231 UG/KG
STD DEV = 0.946779030474 UG/KG
UCL = 9.48700706587816 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7081002669483274
TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 9.077842597842 UG/KG
GEO STD DEV = 1.102653587010 UG/KG
GEOMET UCL = 9.50168899120820 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7333478272386074

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 8.700000000 UG/KG QUALIFIER = U
MEDIAN UCL = 8.94970391233209 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

CHEMICAL = gamma-CHLORDANE

MAX NONDET = 170.000000000 UG/KG
MIN NONDET = 81.000000000 UG/KG
STD NONDET = 110.000000000 UG/KG

MEAN = 94.4615384615 UG/KG
STD DEV = 17.798510675012 UG/KG
UCL = 101.30306570614468 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.5979195227529562

TEST STAT = 0.920

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 93.189151740328 UG/KG
GEO STD DEV = 1.167142215099 UG/KG
GEOMET UCL = 93.63778676427624 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6796917446434735

TEST STAT = 0.920

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 88.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 90.00000000000000 UG/KG

TOTAL # DATA = 26
DETECTS = 0
NONDETECTS = 26
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 26

METALS

SURFACE SOIL - METALS AND INORGANICS - 8/13/92

CHEMICAL = ALUMINUM

MAX DETECT = 27600000.000000000 UG/KG
MIN DETECT = 6370000.000000000 UG/KG

MEAN = 13175806.4516129028 UG/KG
STD DEV = 4420104.92810320575 UG/KG
UCL = 14731800.0415928476 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9239091337182359
TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 12510618.1186137516 UG/KG
GEO STD DEV = 1.375933070734 UG/KG
GEOMET UCL = 12510618.6029785052 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9875034559091072
TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 12000000.000000000 UG/KG
MEDIAN UCL = 14091281.8151146844 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = AMMONIA

MAX DETECT = 4400.000000000 UG/KG
MIN DETECT = 684.000000000 UG/KG
MAX NONDET = 350.000000000 UG/KG
MIN NONDET = 338.000000000 UG/KG
STD NONDET = 338.000000000 UG/KG

MEAN = 2028.1904761905 UG/KG
STD DEV = 1094.943165258998 UG/KG
UCL = 2496.50540359470688 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9570341125726062
TEST STAT = 0.908

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 1671.247187341850 UG/KG
GEO STD DEV = 1.996737720961 UG/KG
GEOMET UCL = 1672.10120617178245 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9051194351790508
TEST STAT = 0.908

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 2110.000000000 UG/KG
MEDIAN UCL = 2524.54620905283628 UG/KG

TOTAL # DATA = 21
DETECTS = 19
NONDETECTS = 2
DETECT FREQ = 90.48 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 21

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = ANTIMONY

MAX DETECT = 9800.000000000 UG/KG
MIN DETECT = 9800.000000000 UG/KG
MAX NONDET = 12000.000000000 UG/KG
MIN NONDET = 8400.000000000 UG/KG
STD NONDET = 8400.000000000 UG/KG

MEAN = 9370.9677419355 UG/KG
STD DEV = 1091.962881440248 UG/KG
UCL = 9755.36749525676532 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7402363508080246

TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 9313.347743374923 UG/KG
GEO STD DEV = 1.114544541500 UG/KG
GEOMET UCL = 9313.74009246856076 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7700936588898464

TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 8950.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 9245.64090755734287 UG/KG

TOTAL # DATA = 31
DETECTS = 1
NONDETECTS = 30
DETECT FREQ = 3.23 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

**** HOTSPOT ANALYSIS ****

NO HOTSPOTS FOUND

CHEMICAL = ARSENIC

MAX DETECT = 8500.000000000 UG/KG
MIN DETECT = 3000.000000000 UG/KG

MEAN = 5087.0967741935 UG/KG
STD DEV = 1049.959119168493 UG/KG
UCL = 5456.71009463303471 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9493422585111648

TEST STAT = 0.929

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 4983.548661691378 UG/KG
GEO STD DEV = 1.224620125697 UG/KG
GEOMET UCL = 4983.97976029576330 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9801344459265937

TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 4950.000000000 UG/KG
MEDIAN UCL = 5500.0000000000000 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

**** HOTSPOT ANALYSIS ****

NO HOTSPOTS FOUND

=====

CHEMICAL = BARIUM

MAX DETECT = 291000.0000000000 UG/KG
MIN DETECT = 64000.0000000000 UG/KG

MEAN = 159925.8064516129 UG/KG
STD DEV = 44658.532167071695 UG/KG
UCL = 175646.788401174039 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9736020247054828
TEST STAT = 0.929

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 153635.073992491380 UG/KG
GEO STD DEV = 1.335883017136 UG/KG
GEOMET UCL = 153635.544258570008 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9752059419202934
TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 152500.0000000000 UG/KG
MEDIAN UCL = 173738.454453440529 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 31

=====

HOTSPOT ANALYSIS

NO HOTSPOTS FOUND

=====

CHEMICAL = BERYLLIUM

MAX DETECT = 6200.0000000000 UG/KG
MIN DETECT = 550.0000000000 UG/KG

MEAN = 1010.9677419355 UG/KG
STD DEV = 968.318645363920 UG/KG
UCL = 1351.84146094262292 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.3585855677444014
TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 868.729924511549 UG/KG
GEO STD DEV = 1.539398164688 UG/KG
GEOMET UCL = 869.27183329327283 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7127721333574092
TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 805.0000000000 UG/KG
MEDIAN UCL = 958.25636302293685 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 31

=====

HOTSPOT ANALYSIS

NO HOTSPOTS FOUND

=====

CHEMICAL = CADMIUM

MAX DETECT = 1300.000000000 UG/KG
MIN DETECT = 710.000000000 UG/KG
MAX NONDET = 860.000000000 UG/KG
MIN NONDET = 600.000000000 UG/KG
STD NONDET = 600.000000000 UG/KG

MEAN = 733.9285714286 UG/KG
STD DEV = 155.042374063035 UG/KG
UCL = 791.35707045126924 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7724655836976755
TEST STAT = 0.924

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 720.225105518532 UG/KG
GEO STD DEV = 1.205467251602 UG/KG
GEOMET UCL = 720.67161683712391 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.8293046357250200
TEST STAT = 0.924

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 650.000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 826.85672569686596 UG/KG

TOTAL # DATA = 28
DETECTS = 6
NONDETECTS = 22
DETECT FREQ = 21.43 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 28

HOTSPOT ANALYSIS

NO HOTSPOTS FOUND

CHEMICAL = CALCIUM

MAX DETECT = 3820000.000000000 UG/KG
MIN DETECT = 4160000.000000000 UG/KG

MEAN = 10346451.6129032262 UG/KG
STD DEV = 7471216.40067554172 UG/KG
UCL = 12976516.9660786465 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7698931945393517
TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 8522982.61982653476 UG/KG
GEO STD DEV = 1.805483514373 UG/KG
GEOMET UCL = 8522983.25540438294 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9196771423964639
TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 7895000.000000000 UG/KG
MEDIAN UCL = 10154151.7914977539 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

HOTSPOT ANALYSIS

NO HOTSPOTS FOUND

CHEMICAL = CESIUM

MAX DETECT = 4400.000000000 UG/KG
MIN DETECT = 1500.000000000 UG/KG

MEAN = 2677.4193548387 UG/KG
STD DEV = 720.084975908133 UG/KG
UCL = 2930.90827082123906 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9386051208219947
TEST STAT = 0.929

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 2586.470806679567 UG/KG
GEO STD DEV = 1.298678432321 UG/KG
GEOMET UCL = 2586.92797576242992 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9772283568447423
TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 2550.000000000 UG/KG
MEDIAN UCL = 2891.28181511468438 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = CHROMIUM

MAX DETECT = 80500.000000000 UG/KG
MIN DETECT = 8400.000000000 UG/KG

MEAN = 21290.3225806452 UG/KG
STD DEV = 17847.135034178449 UG/KG
UCL = 27572.9851337726250 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.5653898972402573
TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 17565.799651797312 UG/KG
GEO STD DEV = 1.713590858141 UG/KG
GEOMET UCL = 17566.4028810044183 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.8058726218198642
TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 15200.000000000 UG/KG
MEDIAN UCL = 17345.6409075573429 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = COBALT

MAX DETECT = 11700.000000000 UG/KG
MIN DETECT = 5200.000000000 UG/KG

MEAN = 7829.0322580645 UG/KG
STD DEV = 1557.954313874674 UG/KG
UCL = 8377.47329403577714 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9435917815131862

TEST STAT = 0.929

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 7682.937330634608 UG/KG
GEO STD DEV = 1.211945352227 UG/KG
GEOMET UCL = 7683.36396738421990 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9754293952952273

TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 7400.000000000 UG/KG
MEDIAN UCL = 8182.56363022936876 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = COPPER

MAX DETECT = 181000.000000000 UG/KG
MIN DETECT = 14200.000000000 UG/KG

MEAN = 25125.8064516129 UG/KG
STD DEV = 29610.361827837263 UG/KG
UCL = 35549.4352908660658 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.3556473678177803

TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 20230.869237890289 UG/KG
GEO STD DEV = 1.653083845835 UG/KG
GEOMET UCL = 20231.4511670321663 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.6265005997018923

TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 16650.000000000 UG/KG
MEDIAN UCL = 19836.9227226720250 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = IRON

MAX DETECT = 2970000.000000000 UG/KG
MIN DETECT = 1160000.000000000 UG/KG

MEAN = 16970967.7419354841 UG/KG
STD DEV = 3908402.32587369345 UG/KG
UCL = 18346828.5110896453 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9129525109910038
TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 16568115.3090540189 UG/KG
GEO STD DEV = 1.239684606748 UG/KG
GEOMET UCL = 16568115.7454557177 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9634245339137379
TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 16650000.000000000 UG/KG
MEDIAN UCL = 18173845.4453440532 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = LEAD

MAX DETECT = 228000.000000000 UG/KG
MIN DETECT = 7100.000000000 UG/KG

MEAN = 38058.0645161290 UG/KG
STD DEV = 36840.149680911542 UG/KG
UCL = 51026.7694880263880 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.4646247974125419
TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 31335.895876381208 UG/KG
GEO STD DEV = 1.725425679002 UG/KG
GEOMET UCL = 31336.5032717576032 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.8738855238962916
TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 30400.000000000 UG/KG
MEDIAN UCL = 36200.000000000000 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = LITHIUM

MAX DETECT = 15000.0000000000 UG/KG
MIN DETECT = 4500.0000000000 UG/KG

MEAN = 9819.3548387097 UG/KG
STD DEV = 2817.734087918610 UG/KG
UCL = 10811.2716032175304 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9649228882466144

TEST STAT = 0.929

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 9382.687831131447 UG/KG
GEO STD DEV = 1.365344048739 UG/KG
GEOMET UCL = 9383.16846827072550 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9452113049419960

TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 9300.0000000000 UG/KG
MEDIAN UCL = 11536.9227226720268 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = MAGNESIUM

MAX DETECT = 5440000.0000000000 UG/KG
MIN DETECT = 2130000.0000000000 UG/KG

MEAN = 3227096.7741935486 UG/KG
STD DEV = 743605.833621580619 UG/KG
UCL = 3488865.65285304096 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9254720583727784

TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 3146724.77797947219 UG/KG
GEO STD DEV = 1.249236522572 UG/KG
GEOMET UCL = 3146725.21774369804 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9507408071078181

TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 3130000.0000000000 UG/KG
MEDIAN UCL = 3566512.72604587395 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

=====

CHEMICAL = MANGANESE

MAX DETECT = 476000.000000000 UG/KG
MIN DETECT = 145000.000000000 UG/KG

MEAN = 295806.4516129032 UG/KG
STD DEV = 78252.453060524509 UG/KG
UCL = 323353.380326795392 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9556517863198859

TEST STAT = 0.929

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 285781.116411032621 UG/KG
GEO STD DEV = 1.301498367238 UG/KG
GEOMET UCL = 285781.574572807003 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9815402622854633

TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 280000.000000000 UG/KG
MEDIAN UCL = 317282.045377867122 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

=====

CHEMICAL = MERCURY

MAX DETECT = 70.000000000 UG/KG
MIN DETECT = 60.000000000 UG/KG
MAX NONDET = 80.000000000 UG/KG
MIN NONDET = 50.000000000 UG/KG
STD NONDET = 60.000000000 UG/KG

MEAN = 62.9032258065 UG/KG
STD DEV = 6.812487768369 UG/KG
UCL = 65.30140129590708 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8269201790134562

TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 62.533763895380 UG/KG
GEO STD DEV = 1.114957959384 UG/KG
GEOMET UCL = 62.92625852302311 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.8243387360809220

TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 60.000000000 UG/KG QUALIFIER = U*
MEDIAN UCL = 70.0000000000000 UG/KG

TOTAL # DATA = 31
DETECTS = 4
NONDETECTS = 27
DETECT FREQ = 12.90 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

=====

CHEMICAL = MOLYBDENUM

MAX DETECT = 5100.000000000 UG/KG
MIN DETECT = 1600.000000000 UG/KG
MAX NONDET = 1900.000000000 UG/KG
MIN NONDET = 1500.000000000 UG/KG
STD NONDET = 1500.000000000 UG/KG

MEAN = 2534.4827586207 UG/KG
STD DEV = 988.651419365329 UG/KG
UCL = 2894.31515955089344 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8503559553470713

TEST STAT = 0.926

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 2373.402494109808 UG/KG
GEO STD DEV = 1.420862454240 UG/KG
GEOMET UCL = 2373.91963527633652 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9230920559888767

TEST STAT = 0.926

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 2250.000000000 UG/KG
MEDIAN UCL = 2600.000000000000 UG/KG

TOTAL # DATA = 29
DETECTS = 24
NONDETECTS = 5
DETECT FREQ = 82.76 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 29

***** HOTSPOT ANALYSIS *****

NO HOTSPOTS FOUND

CHEMICAL = NICKEL

MAX DETECT = 101000.000000000 UG/KG
MIN DETECT = 10000.000000000 UG/KG

MEAN = 21632.2580645161 UG/KG
STD DEV = 19173.711625081614 UG/KG
UCL = 28381.9105886143807 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.5116764315539230

TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 17923.409339508082 UG/KG
GEO STD DEV = 1.670922573286 UG/KG
GEOMET UCL = 17923.9975483528215 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.7369740578537082

TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 15550.000000000 UG/KG
MEDIAN UCL = 17882.5636302293678 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

***** HOTSPOT ANALYSIS *****

NO HOTSPOTS FOUND

CHEMICAL = NITRATE/NITRITE

MAX DETECT = 3830.000000000 UG/KG
MIN DETECT = 340.000000000 UG/KG
MAX NONDET = 279.000000000 UG/KG
MIN NONDET = 265.000000000 UG/KG
STD NONDET = 265.000000000 UG/KG

MEAN = 1668.7037037037 UG/KG
STD DEV = 1127.387041719983 UG/KG
UCL = 2093.95654888875015 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION
NORMAL STAT = 0.9183335294557663
TEST STAT = 0.923

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1217.963672716364 UG/KG
GEO STD DEV = 2.397006582791 UG/KG
GEOMET UCL = 1218.86782881496902 UG/KG
SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION
LOGNORM STAT = 0.9004347633207530

TEST STAT = 0.923
DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1610.000000000 UG/KG
MEDIAN UCL = 2097.52358110797468 UG/KG

TOTAL # DATA = 27
DETECTS = 24
NONDETECTS = 3
DETECT FREQ = 88.89 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 27

**** HOTSPOT ANALYSIS ****
NO HOTSPOTS FOUND

CHEMICAL = OIL AND GREASE

MAX DETECT = 381.000000000 UG/KG
MIN DETECT = 70.000000000 UG/KG

MEAN = 169.6666666667 UG/KG
STD DEV = 63.940944976161 UG/KG
UCL = 199.20587618157128 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION
NORMAL STAT = 0.8362654365454126

TEST STAT = 0.897
DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 159.643649377018 UG/KG
GEO STD DEV = 1.411916847538 UG/KG
GEOMET UCL = 160.29592168223010 UG/KG
SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION
LOGNORM STAT = 0.9510620203265733

TEST STAT = 0.897
DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 161.000000000 UG/KG
MEDIAN UCL = 183.000000000 UG/KG

TOTAL # DATA = 18
DETECTS = 18
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 18

**** HOTSPOT ANALYSIS ****
NO HOTSPOTS FOUND

CHEMICAL = POTASSIUM

MAX DETECT = 4600000.0000000000 UG/KG
MIN DETECT = 1730000.0000000000 UG/KG

MEAN = 3000645.1612903224 UG/KG
STD DEV = 620878.334577358793 UG/KG
UCL = 3219210.72126547154 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9323404795149656

TEST STAT = 0.929

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 2937830.59424581006 UG/KG
GEO STD DEV = 1.229615290606 UG/KG
GEOMET UCL = 2937831.02710284432 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9475131613987827

TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 2885000.0000000000 UG/KG
MEDIAN UCL = 3153897.27058027918 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = SELENIUM

MAX DETECT = 750.0000000000 UG/KG
MIN DETECT = 200.0000000000 UG/KG
MAX NONDET = 500.0000000000 UG/KG
MIN NONDET = 200.0000000000 UG/KG
STD NONDET = 210.0000000000 UG/KG

MEAN = 306.0000000000 UG/KG
STD DEV = 127.895790913280 UG/KG
UCL = 351.76692099953607 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7747557891180307

TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 285.905000178221 UG/KG
GEO STD DEV = 1.417985431817 UG/KG
GEOMET UCL = 286.41241974827130 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.8648469293644444

TEST STAT = 0.927

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 260.0000000000 UG/KG
MEDIAN UCL = 344.70724254202509 UG/KG

TOTAL # DATA = 31
DETECTS = 16
NONDETECTS = 15
DETECT FREQ = 51.61 %

NONDETECTS > 2x NONDETECT MINIMUM = 1

TOTAL # STATISTICAL DATA = 30

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = SILICON

MAX DETECT = 156000.0000000000 UG/KG
MIN DETECT = 81000.0000000000 UG/KG

MEAN = 463554.8387096774 UG/KG
STD DEV = 394950.030190598511 UG/KG
UCL = 602587.672847095411 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8496553161159791

TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 313574.140248816868 UG/KG
GEO STD DEV = 2.525895087771 UG/KG
GEOMET UCL = 313575.029430551105 UG/KG
SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION
LOGNORM STAT = 0.9138235015382906
TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 389000.0000000000 UG/KG
MEDIAN UCL = 506128.181511468429 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = SILVER

MAX NONDET = 1400.0000000000 UG/KG
MIN NONDET = 1000.0000000000 UG/KG
STD NONDET = 1100.0000000000 UG/KG

MEAN = 1116.1290322581 UG/KG
STD DEV = 132.218719560769 UG/KG
UCL = 1162.67351105626312 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6826118226428564

TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1109.003724119840 UG/KG
GEO STD DEV = 1.117008746154 UG/KG
GEOMET UCL = 1109.39694067855089 UG/KG
SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION
LOGNORM STAT = 0.7086901008911797
TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 1100.0000000000 UG/KG QUALIFIER = U
MEDIAN UCL = 1100.00000000000000 UG/KG

TOTAL # DATA = 31
DETECTS = 0
NONDETECTS = 31
DETECT FREQ = 0.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 31

=====

CHEMICAL = SODIUM

MAX DETECT = 362000.0000000000 UG/KG
MIN DETECT = 70200.0000000000 UG/KG

MEAN = 157729.0322580645 UG/KG
STD DEV = 76959.336533708731 UG/KG
UCL = 184820.749826621788 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8359144726377271

TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 142499.777074018581 UG/KG
GEO STD DEV = 1.550593087707 UG/KG
GEOMET UCL = 142500.322923708678 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9421461447522753

TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 138500.0000000000 UG/KG
MEDIAN UCL = 157369.227226720279 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

=====

HOTSPOT ANALYSIS

NO HOTSPOTS FOUND

=====

CHEMICAL = STRONTIUM

MAX DETECT = 104000.0000000000 UG/KG
MIN DETECT = 23300.0000000000 UG/KG

MEAN = 54329.0322580645 UG/KG
STD DEV = 20612.636173745886 UG/KG
UCL = 61585.2241993496791 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9233800725536222

TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 50703.057039188672 UG/KG
GEO STD DEV = 1.448533075589 UG/KG
GEOMET UCL = 50703.5669610609257 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9739342126177905

TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 48050.0000000000 UG/KG
MEDIAN UCL = 60821.5363360321571 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

=====

HOTSPOT ANALYSIS

NO HOTSPOTS FOUND

=====

CHEMICAL = THALLIUM

MAX DETECT = 510.000000000 UG/KG
MIN DETECT = 210.000000000 UG/KG
MAX NONDET = 290.000000000 UG/KG
MIN NONDET = 200.000000000 UG/KG
STD NONDET = 200.000000000 UG/KG

MEAN = 277.4193548387 UG/KG
STD DEV = 80.880945638177 UG/KG
UCL = 305.89158231103926 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.7932182882955812

TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 267.870664932030 UG/KG
GEO STD DEV = 1.287885189505 UG/KG
GEOMET UCL = 268.32403450856674 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.8707648738470809

TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 245.000000000 UG/KG
MEDIAN UCL = 280.0000000000000 UG/KG

TOTAL # DATA = 31
DETECTS = 21
NONDETECTS = 10
DETECT FREQ = 67.74 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = TIN

MAX DETECT = 85900.000000000 UG/KG
MIN DETECT = 28300.000000000 UG/KG
MAX NONDET = 38100.000000000 UG/KG
MIN NONDET = 27300.000000000 UG/KG
STD NONDET = 27300.000000000 UG/KG

MEAN = 43712.9032258065 UG/KG
STD DEV = 13488.866183861364 UG/KG
UCL = 48461.3401203107496 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.8864537668994171

TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 41923.408258602220 UG/KG
GEO STD DEV = 1.325691681277 UG/KG
GEOMET UCL = 41923.8749370616497 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9547251433894330

TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 39000.000000000 UG/KG
MEDIAN UCL = 47873.8454453440499 UG/KG

TOTAL # DATA = 31
DETECTS = 24
NONDETECTS = 7
DETECT FREQ = 77.42 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = VANADIUM

MAX DETECT = 69600.000000000 UG/KG
MIN DETECT = 26600.000000000 UG/KG

MEAN = 40348.3870967742 UG/KG
STD DEV = 9894.275665602323 UG/KG
UCL = 43831.4332605172822 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9313167706761960

TEST STAT = 0.929

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 39235.227664749626 UG/KG
GEO STD DEV = 1.262763744818 UG/KG
GEOMET UCL = 39235.6721909146290 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9691332829185619

TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 39150.000000000 UG/KG
MEDIAN UCL = 43467.1772435895036 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

CHEMICAL = ZINC

MAX DETECT = 182000.000000000 UG/KG
MIN DETECT = 52900.000000000 UG/KG

MEAN = 77406.4516129032 UG/KG
STD DEV = 30278.257241831099 UG/KG
UCL = 88065.1972649596137 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6956205501422698

TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 73279.086859661664 UG/KG
GEO STD DEV = 1.358336666512 UG/KG
GEOMET UCL = 73279.5650300174602 UG/KG

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.8120660937545843

TEST STAT = 0.929

DISTRIBUTION IS NOT LOGNORMAL - LOGNORMAL STAT < TEST STAT

MEDIAN = 65050.000000000 UG/KG
MEDIAN UCL = 75829.7362685552216 UG/KG

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

RADIONUCLIDES

SURFACE SOIL - RADIONUCLIDES - 8/13/92

CHEMICAL = AMERICIUM-241

MAX DETECT = 1.944000000 PCI/G
MIN DETECT = 0.022640000 PCI/G
MAX NONDET = 0.013720000 PCI/G
MIN NONDET = 0.012930000 PCI/G
STD NONDET = 0.012930000 PCI/G

MEAN = 0.3327425806 PCI/G
STD DEV = 0.461522705715 PCI/G
UCL = 0.49521075355124 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6630660013237949
TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.153977677943 PCI/G
GEO STD DEV = 3.578933416878 PCI/G
GEOMET UCL = 1.41385669579604 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9803455721099333
TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 0.1358000000 PCI/G
MEDIAN UCL = 0.25421998157895 PCI/G

TOTAL # DATA = 31
DETECTS = 29
NONDETECTS = 2
DETECT FREQ = 93.55 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 31

**** HOTSPOT ANALYSIS ****

NO HOTSPOTS FOUND

CHEMICAL = PLUTONIUM-239/240

MAX DETECT = 12.990000000 PCI/G
MIN DETECT = 0.067690000 PCI/G

MEAN = 2.3075596774 PCI/G
STD DEV = 3.358916284068 PCI/G
UCL = 3.48998685783743 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.6650620266994459
TEST STAT = 0.929

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 0.866745209581 PCI/G
GEO STD DEV = 4.392822173157 PCI/G
GEOMET UCL = 2.41313454977397 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9530404821422153
TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 0.7032500000 PCI/G
MEDIAN UCL = 1.79763526450735 PCI/G

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 31

**** HOTSPOT ANALYSIS ****

NO HOTSPOTS FOUND

CHEMICAL = RADIUM-226

MAX DETECT = 1.259000000 PCI/G
MIN DETECT = 0.647100000 PCI/G

MEAN = 0.949823333 PCI/G
STD DEV = 0.142464977412 PCI/G
UCL = 1.00080377076476 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9865343196113002
TEST STAT = 0.927

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 0.938805138915 PCI/G
GEO STD DEV = 1.167058018238 PCI/G
GEOMET UCL = 1.35643148721911 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9753000983465597
TEST STAT = 0.927

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 0.963400000 PCI/G
MEDIAN UCL = 1.02573536212710 PCI/G

TOTAL # DATA = 30
DETECTS = 30
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 30

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = RADIUM-228

MAX DETECT = 3.054000000 PCI/G
MIN DETECT = 1.328000000 PCI/G

MEAN = 1.912866667 PCI/G
STD DEV = 0.339986248088 PCI/G
UCL = 2.03452918304860 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9265019021105430
TEST STAT = 0.927

DISTRIBUTION IS NOT NORMAL - NORMAL STAT < TEST STAT

GEO MEAN = 1.885001727242 PCI/G
GEO STD DEV = 1.184149134163 PCI/G
GEOMET UCL = 2.30874405283325 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9727545314633794
TEST STAT = 0.927

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 1.923000000 PCI/G
MEDIAN UCL = 2.00764869105043 PCI/G

TOTAL # DATA = 30
DETECTS = 30
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0
TOTAL # STATISTICAL DATA = 30

*** HOTSPOT ANALYSIS ***
NO HOTSPOTS FOUND

CHEMICAL = URANIUM-233,-234

MAX DETECT = 1.662000000 PCI/G
MIN DETECT = 0.678100000 PCI/G

MEAN = 1.1655967742 PCI/G
STD DEV = 0.237557115012 PCI/G
UCL = 1.24922314827861 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9690337571922361
TEST STAT = 0.929

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 1.140140451617 PCI/G
GEO STD DEV = 1.239107357108 PCI/G
GEOMET UCL = 1.57633894380590 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9518062569780011
TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 1.203500000 PCI/G
MEDIAN UCL = 1.25719486352901 PCI/G

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

***** HOTSPOT ANALYSIS *****

NO HOTSPOTS FOUND

CHEMICAL = URANIUM-235

MAX DETECT = 0.122000000 PCI/G
MIN DETECT = 0.052560000 PCI/G
MAX NONDET = 0.087560000 PCI/G
MIN NONDET = -0.005810000 PCI/G
STD NONDET = -0.005810000 PCI/G

MEAN = 0.0797146667 PCI/G
STD DEV = 0.021345509088 PCI/G
UCL = 0.09051698469194 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9172618956194448
TEST STAT = 0.881

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 0.088767467029 PCI/G
GEO STD DEV = 1.279296730133 PCI/G
GEOMET UCL = 0.73618093796906 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9298531070060735
TEST STAT = 0.881

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 0.0790400000 PCI/G
MEDIAN UCL = 0.0904700000 PCI/G

TOTAL # DATA = 31
DETECTS = 15
NONDETECTS = 16
DETECT FREQ = 48.39 %

NONDETECTS > 2x NONDETECT MINIMUM = 16

TOTAL # STATISTICAL DATA = 15

***** HOTSPOT ANALYSIS *****

NO HOTSPOTS FOUND

CHEMICAL = URANIUM-238

MAX DETECT = 2.199000000 PCI/G
MIN DETECT = 0.625700000 PCI/G

MEAN = 1.2667451613 PCI/G
STD DEV = 0.331281827042 PCI/G
UCL = 1.38336510758992 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - NORMAL DISTRIBUTION

NORMAL STAT = 0.9787641356037349

TEST STAT = 0.929

DISTRIBUTION IS NORMAL - NORMAL STAT > TEST STAT

GEO MEAN = 1.222923173540 PCI/G
GEO STD DEV = 1.309299204479 PCI/G
GEOMET UCL = 1.68383104850502 PCI/G

SHAPIRO AND WILK GOODNESS-OF-FIT TEST - LOGNORMAL DISTRIBUTION

LOGNORM STAT = 0.9821077315330593

TEST STAT = 0.929

DISTRIBUTION IS LOGNORMAL - LOGNORMAL STAT > TEST STAT

MEDIAN = 1.2405000000 PCI/G
MEDIAN UCL = 1.43169227226720 PCI/G

TOTAL # DATA = 31
DETECTS = 31
NONDETECTS = 0
DETECT FREQ = 100.00 %

NONDETECTS > 2x NONDETECT MINIMUM = 0

TOTAL # STATISTICAL DATA = 31

*** HOTSPOT ANALYSIS ***

NO HOTSPOTS FOUND

APPENDIX B
BACKGROUND COMPARISON STATISTICS

EQUALITY OF VARIANCE

F Test

The F test is used to assess whether variances in different data sets are equal or unequal. Unequal variances indicate a significant difference between the means of different data sets. The F Test is performed on two data sets (background and site data) as follows:

- 1) Compute the factor V_B

$$V_B = \sum_{j=1}^a N_j (\bar{X}_j - \bar{X})^2$$

where: a = total number of data sets (=2)
 N_j = sample size in each data set
 \bar{X}_j = mean of each data set
 \bar{X} = overall mean of all the data sets

- 2) Compute the factor V

$$V = \sum_{j=1}^a \sum_{k=1}^{N_j} (X_{jk} - \bar{X})^2$$

where: X_{jk} = value of the K^{th} datapoint in the J^{th} dataset

- 3) Compute the factor V_w .

$$V_w = V - V_B$$

- 4) Compute the factors S_B^2 and S_w^2

$$S_B^2 = \frac{V_B}{a - 1}$$

where: N = total number of data points in all of the data sets

$$S_w^2 = \frac{V_w}{N - a}$$

- 5) Compute the F statistic.

$$F = \frac{S_B^2}{S_w^2}$$

- 6) Calculate the degrees of freedom in the numerator (v_1) and denominator (V_2) of the F formula using the following:

$$v_1 = a - 1$$

$$v_2 = N - a$$

- 7) Find the 95th percentile value ($F_{0.95}$) (described in Spiegel 1988, Statistics 2nd Ed., Appendix V). If the F value exceeds $F_{0.95}$, the variances of the data sets are not equal.

Bartlett's Test of Homogeneity of Variances

Bartlett's test is used for assessing whether a number of population variances of normal distributions are equal. The procedure is performed as follows:

- 1) Compute the sample variances for the background data (S_1^2) and for the sample data (S_2^2). The sample variance is the square of the sample standard deviation and is given by the following equation:

$$S^2 = \sum_{i=1}^n (X_i - \bar{X})^2 / (n - 1)$$

where:

n = sample size
 X_i = value of the i_{th} data point
 \bar{X} = mean of the data set

- 2) Compute the test statistic X^2 using the following:

$$X^2 = f \ln(S_p^2) - \sum_{i=1}^k f_i \ln(S_i^2)$$

where:

$$f = \sum_{i=1}^k f_i = \left[\sum_{i=1}^k n_i \right] - k$$

and:

$$S_p^2 = \frac{1}{f} \sum_{i=1}^k f_i S_i$$

- k = number of data sets being compared (=2)
- n_i = sample size of each data set
- n_1 = background data sample size
- n_2 = sample data size
- f_i = degree of freedom for each variance, $n_i - 1$

- 3) Determine the significance level of X^2 with $K-1$ (=1) degrees of freedom from appropriate table (i.e. Table 1, Appendix B in Statistical Analysis of Ground-water Monitoring Data at RCRA Facilities) (EPA 1989). If the significance level is less than 0.05, then the variances are not equal.

Analysis of variance is used to determine whether there is a significant difference between the background and sample means. Unequal variances show that there is a significant difference between background and standard data.

NONPARAMETRIC TECHNIQUE

The Mann-Whitney U test (also known as the Wilcoxin Rank Sum) consists of the following steps:

- (1) Combine concentrations from both site data and background data on a chemical-specific basis. Assign each value (concentration) a rank.¹
- (2) Calculate the sum of the ranks for each of the samples. List these sums by R_1 and R_2 , where N_1 and N_2 are the respective sample sizes. A significant difference between the rank sums R_1 and R_2 , implies a significant difference between the samples.
- (3) Calculate the difference between the rank sums using the statistic:

$$U = N_1 N_2 + \frac{N_1 (N_1 + 1)}{2} - R_1 \quad (4)$$

- (4) Convert the U statistic to the Z statistic, which can be compared to standard normal and lognormal distribution curves as follows:

$$Z = \frac{U - \mu_u}{\sigma_u} \quad (5)$$

- (5) Use the Z statistic to show a significant difference between the site and background concentrations at the 0.10 level.

To assess whether two populations exhibit significant statistical differences, the sample statistic, Z, is computed from the ranks of the populations. The probability, p, is then found from the Z value using a cumulative normal distribution table (e.g., Table A1, Gilbert, 1987). The significance level, α , for a one-tailed probability test is then computed using the following:

$$\alpha = 1 - p$$

If the resulting value exceeds 0.10, then the populations do not demonstrate a significant difference and are considered statistically equal.

¹ If two or more sample values are identical, the sample values are each assigned a rank equal to the mean of the ranks that would otherwise be assigned. These are called ties.